THE STATE OF THE WORLD'S CHILDREN

1990

James P. Grant
Executive Director of the
United Nations Children's Fund
(UNICEF)

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The lives of at least five million children every year could be saved for the amount the world now spends on armaments every day.

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United Nations Children's Fund
(UNICEF)

UNICEF, the United Nations Children's Fund, works with governments in 121 developing countries to help meet the essential needs of all children. Of its total annual budget, approximately 45% is devoted to child health and nutrition programmes, 17% to improvements in water supply and sanitation, 9% to education, 7% to community-based services, and 8% to emergency relief.

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THE STATE OF THE WORLD'S CHILDREN 1990

James P. Grant

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The under-five mortality rate (U5MR) is the number of children who die before the age of five for every 1,000 live births. It is the principal indicator used by UNICEF to measure levels of, and changes in, the well-being of children. The U5MR also governs the order in which countries are listed in the statistical tables annexed to the State of the World's Children report.

Figures given for the U5MR of particular countries, in both the text and statistical tables, are estimates prepared by the United Nations Population Division on an internationally comparable basis, using various sources. In some cases, these may differ from national estimates.

The principle of first call

Great change is in the air as the 1990s begin. And great change is needed if a century of unprecedented progress is not to end in a decade of decline and despair for half the nations of the world. In many countries poverty, child malnutrition, and ill health are advancing again after decades of steady retreat. And although the reasons are many and complex, overshadowing all is the fact that the governments of the developing world as a whole have now reached the point of devoting *half of their total annual expenditures* to the maintenance of the military and the servicing of debt[1]*. These two essentially unproductive activities are now costing the nations of Africa, Asia, and Latin America almost $1 billion every day, or more than $400 a year for each family in the developing world. Half-way through this century, President Eisenhower described the vast scale of military expenditure as 'humanity hanging from a cross of iron': if he were alive to observe the impact of the debt crisis as the century comes to an end, then he would have to add that humanity is also hanging from a cross of gold.

The sums involved are so large that it is difficult to see them in any steady perspective. *Debt and interest payments* in 1988, the latest year for which figures are available, totalled $178 billion – three times as much as all the aid received from the industrialized countries. *Military spending* in the developing nations amounted to $145 billion – an annual expenditure which would be enough to end absolute poverty on this planet within the next 10 years, enabling people everywhere to meet their own and their children's needs for food, water, health care and education.

It is therefore obvious that for much of the world, some significant reduction in debt servicing and defence spending has become the *sine qua non* of a resumption in human progress.

The winds of change

But as we enter the 1990s, the winds of political change are again beginning to stir the human condition. And the most important of the changes they are bringing is the thaw in the cold war. As World Bank President Barber Conable has said, "*The political and ideological forces which have polarized the world for half a century are diminishing*".

More rapidly than could have been imagined, the result has been a relaxing of ideological tensions, a stumbling forward of democracy, a

---

* This aggregate figure includes significant differences between regions and between the balance of military spending and debt servicing within regions. The Middle East, for example, has been accounting for a disproportionately high percentage of the developing world's military spending, while its debt service obligations are relatively light.

Immunization: a league table

The following "league tables" list the nations of the developing world in order of the percentage of their one-year-old children who were immunized with DPT vaccine in 1988. The figures in parentheses indicate the equivalent figure for 1987 and the percentage point rise or fall between the 1987 and 1988 levels.
Because DPT requires three separate vaccinations, it is a good indicator of how well the immunization system as a whole is working. The figures given below are one month more recent than the figures given in Table 3 of the main statistical annex to this report.

Americas	% children immunized (DPT)		
	1988	1987	
Antigua	98	( )	( )
Saint Vincent	98	( )	( )
Chile	96	(93)	(+ 3)
Dominica	96	( )	( )
Cuba	94	(87)	(+ 7)
St. Christopher Nevis	94	( )	( )
Costa Rica	87	(91)	(− 4)
Jamaica	82	(81)	(+ 1)
Uruguay	82	(70)	(+12)
Trinidad & Tobago	80	(79)	(+ 1)
Saint Lucia	78	( )	( )
Barbados	76	( )	( )
Panama	75	(73)	(+ 2)
Colombia	74	(58)	(+16)
Honduras	74	(58)	(+16)
Belize	73	( )	( )
Peru	66	(42)	(+24)
Grenada	65	( )	( )
Guyana	64	(67)	(− 3)
Suriname	64	( )	( )
Argentina	61	(93)	(−32)
El Salvador	61	(53)	(+ 8)
Mexico	60	(62)	(− 2)
Paraguay	57	(58)	(− 1)
Brazil	54	(57)	(− 3)
Ecuador	54	(51)	(+ 3)
Nicaragua	51	(43)	(+ 8)
Venezuela	51	(54)	(− 3)
Haiti	49	(20)	(+29)
Guatemala	47	(16)	(+31)
Dominican Rep.	39	(80)	(−41)
Bolivia	39	(24)	(+15)

Middle East and North Africa	% children immunized (DPT)		
	1988	1987	
Jordan	98	(89)	(+ 9)
Bahrain	97	( )	( )
Morocco	92	(78)	(+14)
Tunisia	91	(89)	(+ 2)
Saudi Arabia	89	(89)	(0)
Cyprus	88	( )	( )
Oman	88	(77)	(+11)
Egypt	87	(81)	(+ 6)
Iraq	86	(76)	(+10)
Libyan Arab Jamahiriya	84	(62)[d]	(+22)
Iran, Islamic Rep. of	80	(74)	(+ 6)
Turkey	77	(71)	(+ 6)
United Arab Emirates	71	(75)	(− 4)
Kuwait	69	(94)	(−25)
Qatar	69	( )	( )
Algeria	–	(66)	( )
Djibouti	65	( )	( )
Syrian Arab Rep.*	58	(70)	(−12)
Yemen, Dem.	35	(25)	(+10)
Yemen	29	(14)	(+15)

Africa South of the Sahara	% children immunized (DPT)		
	1988	1987	
Seychelles	–	(94)	( )
Cape Verde	90	( )	( )
Botswana	89	(86)	(+ 3)
Mauritius	87	(85)	(+ 2)
Tanzania, U. Rep. of	85	(81)[b]	(+ 4)
Gambia	83	( )	( )
Zambia	83	(66)[d]	(+17)
Malawi	82	(55)	(+27)
Rwanda	80	(67)[d]	(+13)
Zimbabwe	79	(77)	(+ 2)
Lesotho	77	( )	( )
Kenya	77	(75)	(+ 2)
Sao Tome & Principe	77	( )	( )
Comoros	–	(71)	( )
Congo	71	(71)	(0)
Gabon	68	(48)	(+20)
Guinea-Bissau	67	(47)	(+20)
Togo	62	(41)	(+21)
Nigeria	58	(20)[e]	(+38)
Senegal	55	(69)[e]	( )
Burundi	54	(73)	(−19)
Sudan	53[a]	(29)	(+24)
Cameroon	53	(45)	(+ 8)
Central African Rep.	42	(24)[b]	(+18)
Zaire	41	(36)	(+ 5)
Madagascar	40	(30)[d]	(+10)
Uganda	40	(39)	(+ 1)
Mozambique	38	(51)	(−13)
Swaziland	37	( )	( )
Ghana	33	(37)	(− 4)
Côte d'Ivoire	32	(71)	(−39)
Benin	30	(52)	(−22)
Burkina Faso	30	(34)	(− 4)
Liberia	28	(28)	(0)
Mauritania	28	(32)[d]	(− 4)
Somalia	26	(25)	(+ 1)
Sierra Leone	25	(30)[d]	(− 5)
Equatorial Guinea	19	( )	( )
Mali	18	(12)	(+ 6)
Ethiopia	16	(16)	(0)
Guinea	16	(15)[d]	(+ 1)
Niger	16	(5)[d]	(+11)
Chad	14	(12)	(+ 2)
Angola	12	(10)	(+ 2)

Asia	% children immunized (DPT)		
	1988	1987	
Singapore	–	(98)	( )
China	96	(75)	(+21)
Samoa	91	( )	( )
Brunei Darussalam	91	( )	( )
Fiji	–	(90)	( )
Korea, Rep. of	86	(76)[d]	(+10)
Maldives	86	( )	( )
Hong Kong	83	( )	( )
Sri Lanka	83	(61)	(+22)
Thailand	80[e]	(48)	(+32)
Philippines	79	(73)	(+ 6)
Indonesia	75	(48)	(+27)
Nepal	74	(46)	(+28)
India	73	(58)	(+15)
Malaysia	72	(59)[d]	(+13)
Bhutan	70	(27)	(+43)
Mongolia	69	(79)	(−10)
Solomon Is.	68	( )	( )
Pakistan	64	(62)	(+ 2)
Viet Nam	62[e]	(51)	(+11)
Vanuatu	58	( )	( )
Korea, Dem. Rep. of	57	(62)	(− 5)
Papua New Guinea	48	(44)[c]	(+ 4)
Kampuchea, Dem.	45	(37)[c]	(+ 8)
Afghanistan	31	(25)	(+ 6)
Myanmar	18	(23)	(− 5)
Lao People's Dem. Rep.	17	(28)[b]	(−11)
Bangladesh	16	(9)	(+ 7)

a Government controlled areas only
b 2 shots only
c 1985
d 1986
e Provisional

* Coverage in Syria has since risen again to 70% as of March 1989.

No reliable estimates are available for Lebanon.

defusing of regional conflicts, and a re-examination of the commitment to present levels of military spending. The INF treaty and the Strategic Arms Reduction Talks are the first results: a reduction in the numbers of tactical nuclear weapons deployed in Europe may well follow.

In other regions of the world, a diminishing military involvement by the superpowers is already becoming evident. And in some of the largest countries, including China, India, and Pakistan, which together account for half the population of the developing world, levels of military spending have begun to fall for the first time in 50 years.

Armed conflicts still scar the surface of the planet. But it is nonetheless the case that fewer wars are being fought in the world at this moment than at any time in the last half-century. It is therefore not impossible to think in terms of an outbreak of peace, nor is it any longer idle to think that a more advanced diplomacy, including the increasing use of international organizations, might one day replace the primacy of force in human affairs.

However long the journey, every step in this direction brings closer the possibility of a more fundamental re-examination of the world's commitment to present levels of military spending. And the resources involved in such a re-examination are so vast that any significant change could not help but have a profound effect on almost every other aspect of the human endeavour. Total military expenditures, in both industrialized and developing worlds, easily exceed *the combined annual incomes of the poorest half of humanity*. The diversion of even 5% or 10% of this vast sum would be enough to reaccelerate progress towards a world in which the basic human needs of all were met.

If the world were to begin moving in this direction in the 1990s, then finance would not be the only resource to be released. For the 50 years since 1939 our world has been preoccupied by war, by the fighting of war, by the threat of war, by the deterring of war, by the preparing for war, by the paying for war. In one or all of these forms, war has distorted our economies, deflected our industries, dominated our research and development, and diverted the finest scientific minds of two generations. Even more important than the claims it has made on our resources, war has claimed too large a share of our human capacity and concern: it has suborned our science and technology; it has usurped our energies and ingenuities; it has distracted the human imagination.

If these human capacities as well as society's financial and physical resources were to be released, even partially, from this preoccupation with war, then it follows that new vistas of human achievement would draw nearer and that progress towards a more genuinely civilized world would become more possible. Peace is not only one of the most longed-for of human goals; it is also an end which would become a means.

The environmental challenge

There would of course be no shortage of challenges to human ingenuity and imagination in a world struggling free of its preoccupation with war. The profound social and psychological problems arising in the turbulent wake of increasing prosperity will undoubtedly preoccupy much of the energies of the industrialized world in the years ahead, and the overarching problem of the environment, including the avoidance of a major ecological catastrophe, will provide a challenge sufficient to absorb far more physical and intellectual resources than are at present assigned to the task.

But alongside these great social and environmental issues, and inseparably linked to them, there remains the quieter but even more fundamental claim of those inhabitants of the planet who have not yet had the luxury of worrying about the problems of prosperity or the consequences of consumerism. Over 1 billion people, a fifth of mankind, still lack adequate food, clean water, elementary education, and basic health care. And for both moral and practical reasons, there can be no real advance towards a more genuinely civilized and environmentally sustainable world society without addressing the residual problem of gross inequity and absolute poverty.

In particular, it is the concern of UNICEF to argue that the needs of *children*, and particularly of those millions of children who are still living and dying in malnutrition and ill health as the twentieth century draws to a close, should have first claim on our concerns and capacities and on the even greater resources which may gradually be released if the world were indeed to move away from its long and wasteful preoccupation with war.

The largest generation

The moral dimension of this argument is of course familiar. It is the greatest condemnation of our times that more than a quarter of a million small children should still be dying *every week* of easily preventable illness and malnutrition. *Every day* measles, whooping cough and tetanus, all of which can be prevented by an inexpensive course of vaccines, kill almost 8,000 children. *Every day* diarrhoeal dehydration, which can be prevented at almost no cost, still kills almost 7,000 children. *Every day* pneumonia, which can be treated by low-cost antibiotics, kills more than 6,000 children. Death and suffering on this scale is simply no longer necessary, and it is therefore no longer acceptable. Morality must march with capacity.

Every single one of those deaths is the death of a child who had a personality and a potential, a family and a future. And for every child who dies, several more live on with malnutrition and ill health and are thereby unable to fulfil the mental and physical potential with which they were born.

Such facts shame and diminish us all. Civilization and progress are not entities to be measured only by GNP and technological capacity. They are also measured by the development of the human conscience, by the degree to which it is offended and the extent to which it acts when faced by the facts of human suffering, the denial of human needs, the violation of human rights.

But as is often the case, the moral argument is ultimately inseparable from the practical. The long-term consequences of poverty and suffering on this scale are well known. And they will affect us all, and affect us increasingly, as we move towards a new millennium. Malnutrition means poor physical and mental growth, poor performance at school and at work, and the perpetuation of poverty from one generation to the next; high child death rates mean high birth rates and rapid population growth; lack of education precludes people from contributing fully to, or benefiting fully from, the development of their communities and their nations; hopelessness and the denial of opportunity erodes self-respect and sows the seeds of almost insoluble social problems for future generations; entrenched injustices and the parading of unattainable wealth before the eyes of poverty provoke an instability and violence which often takes on a life of its own; and, finally, it is becoming increasingly obvious that the extremes of deprivation preclude environmental sensitivity, forcing millions to over-exploit their surroundings in the name of survival.

A major renewal of effort to protect the lives and the development of children, and to end the worst aspects of poverty, would therefore be the greatest long-term investment which the human race could make in its future economic prosperity, political stability, and environmental integrity.

The time to make that investment is now. One and a half billion children will be born in the decade of the 1990s and, towards the end of that decade, a historic turning point will be reached as the number of children being born into the world finally reaches its peak and begins to decline. It is UNICEF's most fundamental belief, as the world struggles to free itself from the old preoccupation with war, that there could be no more important *new preoccupation* than protecting the lives and the development of the largest generation of children ever to be entrusted to mankind.

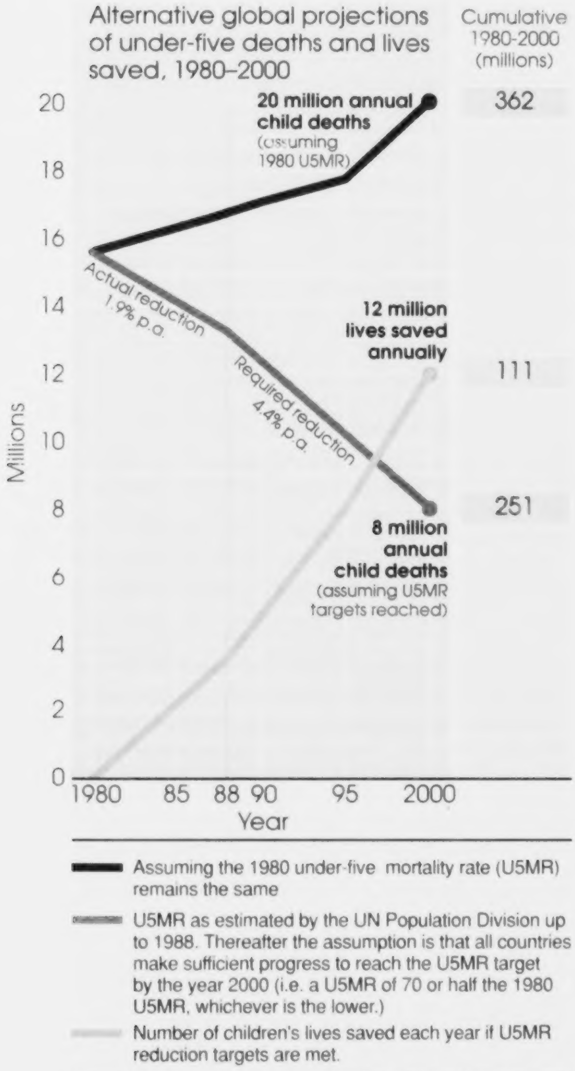
The rights of the child

In the closing years of the 1980s, several new developments and some practical achievements have suggested that this new priority for children may be beginning to emerge.

In both industrialized and developing worlds there is clearly a growing recognition that the

Fig. 1 Saving children's lives 1980–2000

The top two lines on the chart show two possible trends in the annual number of child deaths from 1980 to 2000. The lower line translates the difference between these two trends into the actual number of children's lives which could be saved.



Source: UNICEF, based on revised United Nations Population Division estimates.

Note: Changes from the equivalent chart presented in last year's report are largely the result of revised estimates of actual and projected births.

physical, mental, and emotional needs of the young are a legitimate matter of concern for a nation's political leaders. The President of the United States, for example, has expressed the belief that "*our national character can be measured by how we care for our children*". And in making the same point about the world's responsibility for its children, President Gorbachev has stated simply that "*mankind can no longer put up with the fact that millions of children die every year at the close of the twentieth century*".

The growing importance of this issue may soon find expression in the first ever *World Summit for Children* which was suggested in this report last year and which has since been endorsed by over 100 governments. Projected for the second half of 1990, the Summit would bring together Presidents and Prime Ministers from all regions of the world to discuss and draw world attention to the need for a new preoccupation with children. On the agenda would be the glaring opportunities now available for saving the lives of up to 50 million young children and protecting the normal growth of many millions more in the decade ahead (fig. 1). Chapter II of this year's *State of the World's Children* report is devoted to a discussion of the six most obvious and universal of those opportunities and is intended as a specific input to the preparations for the Summit.

A *Summit for Children* would also consider another major development in the emergence of this priority.

After 10 years of detailed negotiations, the *Convention on the Rights of the Child* has finally been brought before the General Assembly of the United Nations. Setting minimum standards of protection for children's survival, health and education, as well as providing explicit protection against exploitation at work, against physical or sexual abuse, and against the degradations of war, the Convention is the first agreement among the nations of the world on the legally defined rights of the child (panel 2). Like many such documents in history, it is the statement of an ideal which few if any nations have so far achieved. But as more and more nations ratify its text and begin to enact its provisions into national law, and as the press and public become more concerned to ensure its

The Convention: on the rights of the child

At the end of 1989 the Convention on the Rights of the Child was brought for adoption to the General Assembly of the United Nations. The fruit of ten years of exhaustive consultations involving many governments, UN agencies and some 50 NGOs, the Convention aims to set universal standards for the defence of children against neglect, exploitation and abuse.

The document is unique in its breadth, bringing together in one comprehensive code the legal benefits and stipulations concerning children, which were previously scattered through scores of other international agreements of varying scope and status. It applies to all persons below the age of 18, except where children attain their majority at an earlier age according to national law.

The rights enshrined in the Convention apply equally to all children, without regard to race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. Another fundamental principle is that the 'best interests' of the child, should be used as the touchstone for all decisions affecting children's health, wellbeing and dignity.

The provisions of the Convention apply to three main areas of children's rights: survival, development, and protection.

○ Survival: The first specific right mentioned is the inherent right to life. States must ensure, "to the maximum possible, the survival and development of the child". The Convention recognizes the right of access to health care services (such as immunization and oral rehydration therapy), and to an adequate standard of living (including food, clean water, and a place to live). In addition, the child has the right to a name and a nationality.

○ Development: To allow every individual the chance to develop to his or her potential, the Convention contains provisions relating to the child's right to education, to rest and leisure, to freedom of expression and information, and to freedom of thought, conscience and religion. It also stipulates that parents shall give 'due weight' to the views of children, in accordance with their age and maturity.

○ Protection: Many of the Convention's provisions are designed to provide protection for children in a wide range of circumstances. Some deal with mentally or physically disabled children, others with refugees or parentless children, or with children who are separated from their parents. It also recognizes that, in some cases, children need to be protected from their own parents, or may be in a situation where the parents may be unable to take proper care of them.

The Convention also covers economic, sexual and other forms of child exploitation, and requires that appropriate measures be taken to protect children from the use and sale of drugs. In addition, it sets out the rights of children in times of armed conflict, and of children who are in trouble with the law.

Once ratified by 20 countries, the Convention enters into force and its provisions become binding in each ratifying country.

The Convention also includes a number of follow-up measures designed to encourage compliance with its provisions by governments, private organizations and individuals. A Committee on the Rights of the Child will be established with ten experts serving in their personal capacities, and States which ratify the Convention will report to the Committee on the steps they have taken to comply with its provisions.

It is expected that the standards set by the Convention will become the point of reference for everyone concerned with the health, development and protection of children. The Convention will thus provide a universally valid basis for advocacy on behalf of children everywhere.

observance, it may gradually become the standard below which any civilized nation, rich or poor, will be ashamed to fall.

The principle of first call

Transcending its detailed provisions, the *Convention on the Rights of the Child* embodies a fundamental principle which UNICEF believes should affect the course of political, social and economic progress in all nations over the next decade and beyond. That principle is that the lives and the normal development of children should have *first call* on society's concerns and capacities and that children should be able to depend upon that commitment in good times and in bad, in normal times and in times of emergency, in times of peace and in times of war, in times of prosperity and in times of recession.

If the trench of such a principle could be dug across the battlegrounds of political and economic change in the decade ahead, then civilization itself would have made a significant advance. The essence of civilization is the protection of the vulnerable and of the future: children, like the environment, are both the vulnerable and the future. Failure to protect the physical, mental and emotional development of children is the principal means by which humanity's difficulties are compounded and its problems perpetuated. And *special measures* to protect children from the inadequacies and mistakes of the adult world is a principal means by which many of mankind's most fundamental problems might ultimately be allayed. The principle of first call therefore underlies all of the issues discussed in this year's report, just as UNICEF believes it should underlie the many decisions and actions which will shape the decade ahead.

The early examples

The 1980s have already seen the first examples of this principle of first call being put into practice, albeit partially. In 1985, El Salvador became the first country ever to suspend a civil war for the purpose of respecting the right of its children to be immunized. It was an historic decision, and marks one of the first steps on the road to accepting that protection for the lives and the growth of children should not have to depend on the vagaries of adult society, on whether a country is at war or at peace, on whether a particular party is in power, on whether the economy has been well managed or bungled, on whether debts have been paid or rescheduled, on whether commodity prices have fallen or risen, or on any other trough or crest in the endless and inevitable undulations of political and economic life in the modern nation state.

Through the good offices of the Catholic Church and the Red Cross, both sides in El Salvador's war have since agreed to a further 14 separate 'days of tranquillity' over the last 5 years, during which time over 3 million doses of vaccine have been administered. And as a further development of that concept, both sides in Sudan's civil war agreed, in 1989, to create 'corridors of tranquillity' through which 120,000 metric tonnes of food and other supplies, including immunization supplies, have since reached the two and a quarter million civilian victims of that war. So far, this unprecedented compact has avoided a repetition of the events of 1988 which claimed the lives of an estimated 250,000 civilians – the majority of them women and children. Recently, both the new military government in Khartoum and the leaders of the Sudan People's Liberation Army have agreed to keep open the 'corridors of tranquillity' and requested that the relief effort be continued into 1990. It is not inconceivable that the channels of communication established by this process might quicken the pulse of peace in the region or that the example being set in the Sudan might one day become the accepted norm in the conduct of civil or international war. It is significant, for example, that co-operation from all sides is now allowing the child immunization programme to proceed in Afghanistan and that the nation of Sri Lanka, racked by worsening violence and disruption, is able to announce this month (December 1989) that, with the co-operation of all parties, the goal of universal child immunization has now been reached.

But if the principle of first call and the *Convention on the Rights of the Child* are widely perceived as being applicable only to abnormal circumstances or specific abuses, then the heart of the matter will have been missed. The important point about the principle of 'first call for children' is that those children should be able to depend on that commitment at all times and in all circumstances. And it is in what may appear to be more normal times and more everyday circumstances that the need for this principle can be most easily overlooked.

Nothing could demonstrate that need more clearly than the impact of the debt crisis, and of consequent economic adjustment programmes, on so many nations of the developing world during the second half of the 1980s. For if the principle of first call had already been entrenched in the conscience of nation states and of the international community, then the story of these years for many millions of the world's children would have been very different. As it is, the lack of such a principle, which in practice has meant the lack of *specific protection* afforded to children during the process of economic adjustment, has meant that the heaviest burden of the debt crisis has undoubtedly fallen on the growing minds and bodies of the poorest and most vulnerable members of the rising generation.

Children paying

Despite a totally inadequate flow of information about the effects of the recession on children, it is possible to demonstrate that the lack of any widespread acceptance of the principle of first call has unnecessarily exposed millions of children to the sharpest edges of the adjustment process.

First of all, the poorest and most vulnerable children have paid the third world's debt with the sacrifice of their *normal growth*.

Over the course of the 1980s, average incomes have fallen by 10% in most of Latin America and by over 20% in sub-Saharan Africa. For many, the story has been even worse than such figures suggest. In many urban areas, real minimum wages have declined by as much as 50%[2]. For the very poorest, those who are forced to spend three quarters of their incomes on food, cuts in income on this scale cannot mean anything else but the malnourishment of their children.

Had national governments and the international community chosen to do so, the increase in child malnutrition could have been prevented. Effective low-cost means are now available to protect the nutritional health of children (see pages 27 to 35), and those means could have been deployed if the principle had been widely accepted that the growing minds and bodies of children have a right to first call on society's concern and resources, in bad times as well as good. In practice, too few governments have taken special protective action in the 1980s and many nations have seen malnutrition rising as a result.

Second, the poorest and most vulnerable children have paid the third world's debt with their *health*.

Over the last few years, a decline in health spending per person has been documented in more than three quarters of the nations of Africa and Latin America, and the decline is almost certainly more widespread than these figures suggest. Hundreds of health clinics have been closed down, and many which remain open are understaffed and lacking essential supplies. Family planning services have been cut back, imported drugs have become more expensive, and in the first part of 1989 the health services of Ecuador, Panama, Paraguay, and Peru have been unable even to buy vaccines[3].

Fragmentary evidence of the tragic and inevitable results is gradually becoming available. Infant mortality is known to have risen in parts of Latin America and Africa south of the Sahara. The incidence of low birth weight, a sensitive indicator of the well-being of women, has increased in 7 nations out of the 15 for which recent information is available[4].

In the case of health, many governments have at least ***begun*** to activate the principle of first call and to implement some of the low-cost ways and means now available for protecting the lives and the growth of their young children. More will be said about those achievements later, but Africa deserves special credit in this context for its continent-wide effort which has lifted immunization coverage from under 10% to over 60% despite the difficulties of the last decade.

Third, the poorest and most vulnerable children have also paid the third world's debt with the loss of their opportunity to be *educated* (fig. 2).

In the 37 poorest countries, spending per head on schools has declined by approximately 25% in the last decade[5]. Capital spending, including expenditure on books and writing materials, has come to a halt in many nations and thousands of teachers have left their posts after months without being paid. The overall impact has been summed up by the Director-General of UNESCO in his 1989 address to UNICEF's Executive Board:

> "*The past few years have witnessed an unprecedented halt in the growth of basic educational services, a stagnation and deterioration of educational quality* . . ..
>
> "*Economic recession and the growing indebtedness of the South have no doubt had a major part in this educational drama. . . . In nearly half the developing countries, the goal of Universal Primary Education is receding rather than drawing nearer. In roughly one out of five developing countries, primary student numbers have actually started declining . . . In two out of every three developing countries spending per student, in real terms, has declined since 1980. Education has thus taken a turn for the worse . . . and the extrapolation of trends into the future shows no encouraging signs*".

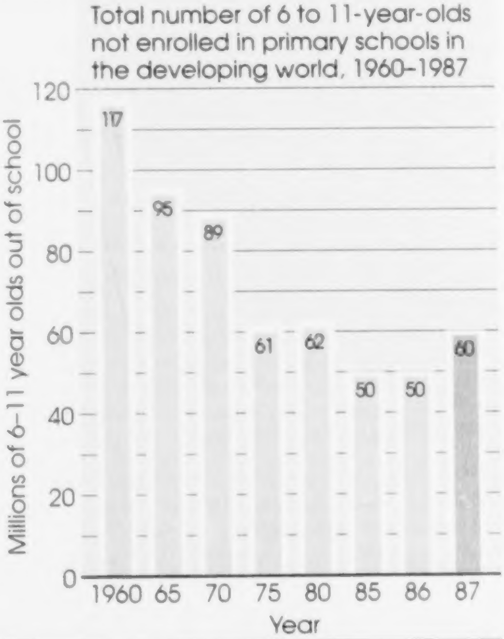
Ways and means of reversing the trend will be the dominant item on the agenda of the first *World Conference on Education for All* to be held in Thailand in March 1990. But any and all of the strategies it recommends would fall on more fertile ground if it were to become the accepted ethic of all societies that the education of children should be protected at all times and at all costs.

Adjustment with a human face

In its day-to-day work in over a hundred developing nations, UNICEF is constantly brought face to face with the many other ways in which children are being exposed to, rather than protected from, the consequences of debt, recession, and economic adjustment programmes. Another obvious and very visible consequence, for example, is the increase in the number of families in which both parents are being forced to find paid jobs outside the home and the corresponding decline in the amount of time available for breast-feeding, preparing weaning foods, boiling water, making sure children are immunized, tending to common cuts and infections, and undertaking all the other essential and time-

Fig. 2 Progress reversed

The 1960s and 1970s saw a rapid expansion of primary schooling in the developing world, reducing the number of children out of school to 50 million. In the mid 1980s the proportion of children enrolled began to fall while the total number of children continued to grow. As a result, the number of children out of school has increased to 60 million – the first significant rise in 4 decades.



Source: Population estimates and projections by the UN Population Division and estimates of primary enrolment calculated from the UNESCO Statistical Yearbook.

Adjustment: with a human face

UNICEF's call for 'adjustment with a human face' was first issued in the early 1980s, as evidence was mounting of rising malnutrition, education set-backs and deterioration in health services in many parts of the developing world.

Initially, the idea met with doubt and scepticism. By the late 1980s, however, there was widespread acceptance of the need for measures to protect children and other vulnerable groups, alongside efforts to deal with the problems of debt and balance of payments deficits.

The response is still inadequate, but some actions are under way – for example in African countries such as Cameroon, Ghana, Guinea, Kenya, Madagascar and Senegal. In Bolivia and Ecuador in Latin America, and in the Philippines and Sri Lanka in Asia, there are also moves towards more 'human' adjustment policies. The World Bank, the World Food Programme, the International Fund for Agricultural Development, UNESCO and the World Health Organization have also taken a number of new initiatives, some focusing on the nutritional needs of vulnerable groups.

Ghana provides a good example of what is meant, in practice, by 'adjustment with a human face'. The Programme of Action to Mitigate the Social Costs of Adjustment (PAMSCAD) was devised by the Government of Ghana with an inter-agency team including the World Bank, the United Nations Development Programme and UNICEF. PAMSCAD consists of programmes to strengthen employment generation, nutrition, water supply, primary education and community initiatives – all focused on the poorer areas and most vulnerable groups of the population. The cost is $85 million over two years; not small, but still only 6·8% of the estimated total cost of international support for Ghana's economic adjustment programme.

UNICEF stresses three aspects of 'adjustment with a human face'.

First, the goal of protecting the poor and vulnerable should become a basic objective of economic adjustment, alongside the longer-term goal of human-focused, sustainable development.

Second, adjustment programmes should be recast to incorporate specific measures aimed at investing in the poor. These would include credit for small-scale farmers and traders, and support for women producers in particular.

This investment would also entail restructuring social sectors to give a greater proportion of attention and resources to low-cost, high-impact services – such as primary health care rather than hospitals, primary education and literacy rather than universities, and basic water supplies rather than prestige housing developments. In addition, there are pressing needs for special measures to protect the nutrition of under-fives and for schemes to assist the unemployed, for example through 'food for work' programmes.

Third, 'adjustment with a human face' requires monitoring of human indicators and not simply of economic variables – nutrition as well as inflation, food intake as well as the balance of payments, shortfalls in household income as well as government budget deficits.

Consistently implemented, these policies imply a very different pattern of development, with the emphasis on people rather than on macro-economics. But it is important to stress that this pattern of development also makes economic sense. It is not simply a welfare programme. Many studies have shown that investment in human resources is in fact the surest way to achieve and sustain long-term economic growth. It is also a strategy which relies on community and non-governmental action, not simply on government support.

A focus on 'adjustment with a human face' must gradually give way to 'development with a human face'. During the 1990s, increased international support for investment in human resources – nutrition, health and basic education – must become a priority, with national and international action mobilizing around 'human' goals.

consuming chores of child care. And although impossible to quantify, UNICEF staff in many nations know from the evidence of their own eyes that the debt crisis and the consequent fall in incomes for the poor has contributed to increases in juvenile delinquency, in the numbers of children abandoned on the streets, in accidents, and in drug abuse.[6]

Because UNICEF is so frequently confronted with these consequences of the debt crisis, it is difficult to avoid frustration with present progress. In the industrialized world, it seems that normal sensitivities are being dulled by the length of the debt drama, the distance from the stage, and the complexity of the plot. No one wanted the debt crisis. And although some have profited, it is in no one's long-term interest. The blame lies with irresponsible borrowers and irresponsible lenders, and with international economic arrangements, including trade regulations and commodity prices, over which the developing world has little control but within which it must earn its living. Meanwhile the consequences are falling in totally disproportionate measure on those who are least responsible for the debt and have the least capacity to repay. Truly, as President Mugabe of Zimbabwe has said, "*Few scourges in human history can claim so many victims as today's debt crisis*".

As the above examples show, the young and the vulnerable are often hit first and hardest. With few exceptions, *what we are in fact seeing is the exact opposite of the principle that the growing minds and bodies of children should have first call on the protection of society*. Yet somehow the chilling injustice of what is happening is escaping our attention, passing by our windows on the smooth flow of economic analysis, disguising itself in the respectable clothing of the financial vocabulary. We are intermittently told that we are muddling through, a repayment rescheduled here, a debt written down there, masking from our view the closed clinic, the empty desks at school, the unvaried diet, the anaemic mother, the child who never puts on weight.

It is for all of these reasons that, throughout the 1980s, UNICEF has advocated a strategy of 'adjustment with a human face' (panel 3). It makes both economic sense and human sense to protect the poor and the vulnerable – and especially the children – when economies have to be adjusted to new and more difficult external circumstances. As UNICEF Deputy Executive Director Richard Jolly told a Committee of the United States Congress in 1989:–

"*Human capital is a more important factor for achieving economic growth than physical capital. . . . Investment in human capital in the form of nutrition, basic education, and health cannot be postponed: it either takes place at an appropriate age when the need is present – or it does not. For the young child, there is no second chance. The underemphasized tragedy of the disinvestment in human capital in the 1980s is that the results will be carried forward in stunted bodies and deficient educations well into the twenty-first century*".[7]

No economic theory or political ideology can justify even a temporary sacrifice of children's growing minds and bodies. And the strategy of 'adjustment with a human face' is one of the most important examples of the spirit of the *Convention on the Rights of the Child* and of its central principle that all children should be protected from the worst consequences of the adult world's excesses and mistakes, whether we are talking about violence and war or the cumulative effects of economic mismanagement.

The debt trap

The sheer scale of the debt crisis, which now claims an even larger share of the developing world's resources than the military, means that specific action to protect the health, nutrition, and education of young children is unlikely to be sufficient, in many countries, without some significant progress against the problem of debt itself.

Unfortunately, the debt crisis has now become the debt trap. The way out is through a return to healthy economic growth, but the hard-won surpluses which should be available to invest in that growth are instead being sluiced away into the servicing of the debt itself. If the trap is pried open by efforts to increase exports and foreign earnings, then it is likely to be snapped shut again by sudden increases in interest rates. Latin

America's debts, for example, are now four times as large as its total annual exports, which means that each percentage point rise in interest rates requires a 4% increase in exports merely to keep up the momentum of payments. Between the first quarter of 1988 and the first quarter of 1989, international interest rates rose by three percentage points.

By comparison Africa's debts are small, totalling only about 10% to 15% of the amounts owed by the highly indebted Latin American countries which are the main focus of the Baker plan. But when measured in relation to the only criterion which matters to Africa – its export earnings and its ability to pay – the debt burden of Africa is in fact *twice as heavy* as that of Latin America. And Africa's prospects for growth, despite all the debt reductions and reschedulings to date, are still undermined by the fact that resources which might have been available for investment are instead disappearing in debt and interest payments.

The debt crisis therefore casts its shadow across the next decade as well as the last.

There are some small signs of hope. In the last two years, the total debt of the developing world has fallen for the first time since the debt crisis began in the early 1980s. And although debt service ratios have not yet begun to decline, there is at least a growing recognition that more drastic and decisive action on debt – including the writing-off of most of the remaining debts owed by Africa to the governments of the western industrialized nations and further reductions in the commercial debts of many Latin American countries – is in the interests of both industrialized and developing worlds.

But *in the process* of struggling to release this second of the two great brakes on human progress, it is also essential that the international community make a major new commitment to the spirit of the *Convention on the Rights of the Child* and to the fundamentally more civilized principle that the protection of children's lives and development should be the last and not the first obligation to be sacrificed when times are hard. Without such a commitment, it is inevitable that the lives, the health, the growth, and the education of millions of children in the 1990s will again be sacrificed on the altar of debt repayments and adjustment programmes.

For better, for worse

The impact of the debt crisis on children is one illustration of the need for a new ethic which will ensure that the protection of children has first call on the concerns and the capacities of adult society in times of turbulence and transition.

But it would also be a mistake to assume that this new ethic is needed only in the poorest countries or only in the most extreme cases of economic hardship or civil turmoil.

In both the United States and the United Kingdom, for example, 10 years of steady economic growth has been accompanied by a doubling of the number of homeless families. And while the safety nets of social services have slowly frayed, the number of children living in poverty in the United States has risen by more than 3 million (from 11% of the child population in 1979 to over 15% today). Today, approximately one third of Hispanic Americans and one half of African-Americans are living below the accepted poverty line, as are 40% of the children of New York, the financial capital of the world*.

Such figures represent just as great a violation of the new ethic embodied in the *Convention* as anything which has happened in the debt-affected countries of the developing world over the last decade. The growing minds and bodies of these children of the industrialized nations have not been accorded first call on the rising prosperity of their societies, nor has the protection of the hundreds of thousands of children whose lives are blighted by malnutrition, by drugs, by neglect and abuse.

This same principle is equally applicable to those developing countries which have avoided the debt trap and maintained steady, and in some cases spectacular, rates of economic progress over the last decade. Most of Asia falls into this category. The dynamic exporting nations of East Asia are well-known examples, but the giant economies of China and India and the populous nations of Bangladesh, Pakistan and Thailand have also experienced 10 years of rising per capita incomes and slow falls in the proportions of their populations living below the poverty line.

Some of those nations have consciously put economic growth to work for the well-being of their children. In Thailand, for example, the specific goal of eliminating severe malnutrition was built into the Fifth National Development Plan and the result has been a reduction of grade 2 and grade 3 malnutrition (as defined by Thai reference values) to less than 2% in almost every village. In the Republic of Korea, 25 years of rapid economic growth have been accompanied by specific action to translate economic progress into human progress: malnutrition has been virtually eliminated; the under-five death rate has been brought down from 120 to 33 per 1,000; and almost every child has access to both primary and secondary education.

Sustained economic growth has made such achievements easier. But many countries have seen steady economic gains *without* the equivalent social advance, showing that a conscious and specific commitment is necessary to translate the one into the other. And perhaps the most significant aspect of the Korean story is that when economic progress faltered badly, as it did in 1979 and 1980, the stringent economic adjustment programme which was introduced to cope with the crisis was not allowed to erode the most basic aspects of human welfare. The nutritional status of children was monitored and maintained. Basic health services were not allowed to suffer. And the right of all children to education was not compromised by spending cuts. In other words, the way that the crisis was coped with was a model of 'adjustment with a human face' and an example of the principle which demands that the commitment to protect the growing minds and bodies of children be maintained *in both good times and bad*.

Asia's challenge

For Asia as a whole, the story is more mixed. With the important exceptions of Indonesia, Myanmar (Burma) and the Philippines, the continent has avoided the debt trap which has so dominated the development story in Latin America and Africa for the last decade. And for the most part, the steady beat of economic growth has been maintained and in many cases quickened.

Despite this, the problem of absolute poverty in the world still has its centre of gravity in South Asia. Approximately 40% of all the young children who die in the world each year, 45% of the children who are malnourished, 35% of those who are not in school, and over 50% of those who live in absolute poverty, are to be found in just three countries – India, Pakistan, and Bangladesh.

It is not only a question of absolute numbers. The *percentage* of children who are malnourished and the *percentage* of babies who are born with low birth weights, although falling slowly, is still significantly higher in South Asia than in any other region of the world – including sub-Saharan Africa. The challenge of South Asia is therefore the challenge of finding efficient ways and means of converting its steady economic progress into equivalent improvements in the health, nutrition, and education of its children. Pioneering efforts in the 1980s have illustrated the dramatic progress which could be achieved if this challenge were to be widely accepted, and more will be said on this subject later. But the point at issue here is that the principle of first call is as relevant to Asia, as it moves into what may be another decade of significant economic progress, as it is in the most debt-burdened countries of Africa or Latin America.

In sum, the *Convention on the Rights of the Child*, and its fundamental principle of first call for children on society's capacities and concerns, is universally applicable. And as the world-wide adjustment of economies towards a greater role for market economics in almost all societies gets under way, that principle will become even more necessary to protect children from the turbulence that will be caused and the mistakes that will inevitably be made. As the problems facing the children of today's free market economies clearly show, the market-place can be a brutal place for those who lack the purchasing power to make it serve their needs. 'Adjustment with a human face', which UNICEF has advocated in relation to the developing world's debt crisis throughout the last decade, is therefore also relevant to the industrialized world, including the Soviet Union and the countries of Eastern Europe as they move towards the restructuring of their economic systems, and to the United States as it undergoes the adjustment of its own economy to the reality of its huge budget and trade deficits. Whatever the direction or cause of political and economic change in the adult world, children should be specially protected, as far as is humanly possible, from its worst effects.

The achievements of the 80s

The forthcoming *World Summit for Children*, the recently adopted *Convention on the Rights of the Child* and the progress which has been made so far in implementing the concept of *adjustment with a human face* are major landmarks in the emergence of a new priority for children and in the attempt to entrench the 'principle of first call'. But the second half of the 1980s has also seen major practical breakthroughs towards that new priority.

In general, those breakthroughs have all involved the mobilization of today's communications capacity in order to begin putting the benefits of twentieth-century science at the disposal of the majority of the human family. "*We must recognize*," says Dr. Hiroshi Nakajima, Director-General of the World Health Organization, "*that most of the world's major health problems and premature deaths are preventable through changes in human behaviour and at low cost. We have the know-how and technology, but they have to be transformed into effective action at the community level. Parents and families, properly supported, could save two thirds of the 14 million children who die every year – if only they were properly informed.*"

A beginning has been made.

From very low levels at the beginning of the 1980s, immunization has now reached approximately two thirds of the developing world's children (fig. 3). From being almost unknown outside scientific circles a decade ago, oral rehydration therapy (ORT) is now being used by one family in every three (fig. 7). And from only 15% or 20% in the 1960s, effective methods of planning births are now being used by approximately 50% of all couples in their childbearing years[2].

The result is that the first two of these technologies alone, immunization and ORT, are now estimated to be saving over 3 million young lives each year (figs. 6 and 7).

Immunization, in particular, has been the most dramatic public health success story of the last decade. At the end of the 1970s, the World Health Assembly adopted the target of *Universal Child Immunization by 1990* which meant, in practice, attempting to immunize 80% of one-year-olds in the developing world (at which point the transmission patterns of many of the vaccine-preventable diseases are so interrupted that a degree of protection is conferred even on unimmunized children).

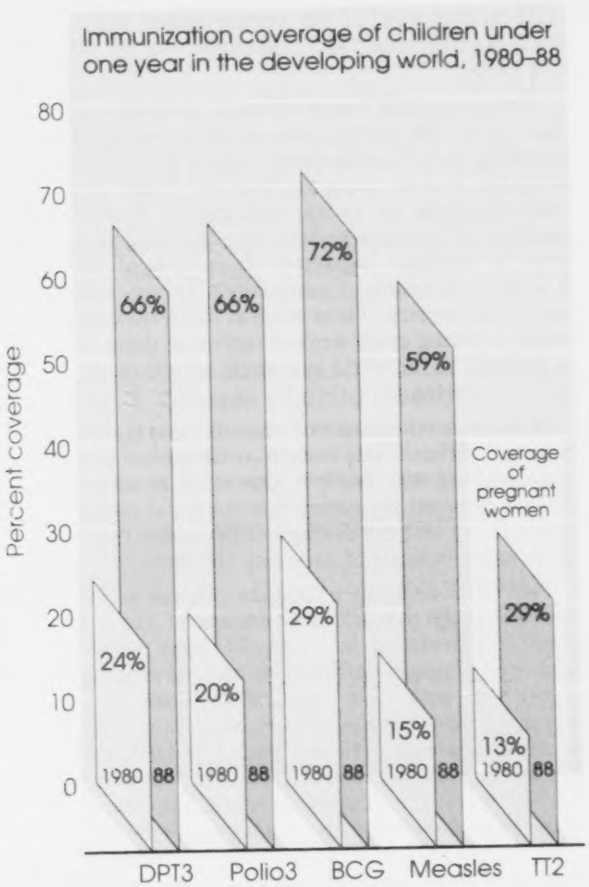
At the time, vaccines were reaching only about 10% to 20% of the developing world's children and the 80% target was regarded by many as an impractical goal which would be talked about less and less as 1990 drew closer and closer. Today, immunization coverage has been lifted to almost 70% and there is still one more year to go.

If coverage had remained at 1977 levels, then approximately 5 million young children would have died in the last twelve months from vaccine-preventable diseases. The actual death toll was just under 3 million. The accelerating immunization effort of the last decade is therefore saving approximately 2 million children each year from death by measles, whooping cough, or tetanus. In addition, there are an estimated one and a half million children walking, running, and playing normally in the villages and neighbourhoods of the developing world today who would be crippled by polio were it not for the immunization efforts of the last decade.

As the next chapter will show, the road ahead may be longer than these figures suggest. But it is practical achievements of this kind, wrested from the grip of the developing world's worst recession since the 1930s, which makes it realistic to think of an emerging new ethic for children and a new

Fig. 3 Immunizing all children by 1990

The 1980's have witnessed an immunization revolution in the developing world, but an extraordinary effort is still required to meet the target of 80% coverage by the end of 1990.



DPT3 - Diphtheria, Pertussis (whooping cough), Tetanus

BCG - BCG vaccine protects against tuberculosis (one dose only).

Measles - One dose only – as close as possible to 9 months.

TT2 - Tetanus (two injections in pregnancy to protect against tetanus of the new-born).

(China is not included in the figures for 1980).

Source: WHO and UNICEF: UCI Reports.

priority for tackling the problems of malnutrition, preventable illness, and early death, in the decade ahead.

As Dr. Nakajima points out, present knowledge about such issues as immunization, dehydration, breast-feeding, child growth, respiratory infections, birth spacing, safe motherhood, malaria, and the prevention of illness, make it possible, at an affordable cost, to build a wall of protection around the growing minds and bodies of the children of the 1990s. But fulfilling that potential, a potential to save the lives of well over 50 million children during the next decade and to protect the nutritional health and normal growth of many millions more, depends above all on the political commitment to give those children first call on our concerns and capacities.

Moving towards new national commitments to undertake that task, and new international commitments to support it, is the practical purpose of the proposed *World Summit for Children.*

In preparation for such a *Summit*, chapter II of this report sets out the main practical and specific opportunities for protecting the lives, the health, and the nutrition of *all* children in the years immediately ahead. It is, in effect, an inventory of the most basic and obvious actions which would indicate that the new commitment to the world's children was becoming a reality. Chapter III looks at affordable opportunities for moving towards the broader goals of primary health care for all and basic education for all in the 1990s. Chapter IV discusses a possible new role for the industrialized nations in assisting the developing world to implement the principle of first call and to accord a new priority to the absolute poor, to children, and to the environment.

The specific opportunities

On present trends, more than 100 million children will die from illness and malnutrition in the 1990s.

These children will not be the victims of any sudden flood or famine. There will be no television cameras at their deaths, no public outrage, no demand for action. They are children who will die little noticed by the world.

The causes of those deaths can be listed on the fingers of one hand. Almost all of those children will die of diseases which were once just as familiar in the industrialized nations. They will die in the sunken-eyed coma of dehydration, or in the gasping extremities of pneumonia, or in the iron grip of tetanus, or in the fever of measles, or on the rack of whooping cough. These five common illnesses, all relatively easy and inexpensive to prevent or treat, will account for two-thirds of all child deaths and over half of all child malnutrition in the decade which lies ahead (fig. 4).

The measure of the practical opportunity now available for protecting the lives and the growth of many millions of children, even in difficult economic times, is that low-cost vaccines, oral rehydration therapy, and antibiotics, could between them prevent the majority of child deaths and child malnutrition in the developing world.

The time is overdue for these basic scientific advances to be put at the disposal of the whole human family rather than being restricted to the minority in the industrialized nations to whom they have long been available*. The vaccines cost less than $1.50 per fully immunized child. Sachets of oral rehydration salts cost approximately 10 cents each. A course of antibiotics costs approximately $1.

It is not only a question of money and technology. It is also a question of the delivery systems and the infrastructure, the management skills and the training, and the use of all possible channels to inform and support parents in applying today's knowledge. But to put the problem into an overall perspective, the *additional costs*, including delivery, of a programme to prevent the great majority of child deaths and child malnutrition in the decade ahead might reach approximately $2.5 billion per year by the late 1990s.

Two and a half billion dollars is a substantial sum. It is 2% of the poor world's own arms spending. It is the approximate cost of five Stealth bombers. It is as much as the Soviet Union has been spending on vodka each month. It is as much as U.S. companies have been spending each year to advertise cigarettes. It is 10% of the European Economic Community's annual subsidy to its farmers. It is as much as the developing world is paying every week to service its debts. It is as much as the world as a whole spends on the military *every day*.

Whatever other reasons may be given, and however difficult the economic climate of the decade ahead may be, it is impossible to accept for one moment the notion that the world *cannot afford* to prevent the deaths and the malnutrition of so many millions of its young children.

Nor can it be accepted that the children at risk are too difficult to reach. In an era when Coke and Pepsi have reached into virtually every village and every neighbourhood in the developing world with both their products and their messages, it cannot be impossible to reach those same communities with a 10-cent packet of ORS and the message that it can save a child's life. Over the last 20 years, the developing world has revolutionized its capacity to communicate with the vast majority of its citizens: newspapers, radio or television now reach into almost every home; education and health services now have some presence in almost every community; employers, trade unions, and co-operatives are now in regular communication with their work-forces and memberships; retail industries, public services, and advertising agencies regularly speak to a huge public; the voices of religion, of the non-governmental organizations, of the women's movements, of the arts and entertainment industries, now reach unprecedented audiences.

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* Because of its relatively recent discovery, ORT is the exception. But dehydrating children in the industrialized world have been protected by intravenous rehydration therapy available in hospitals. Hospitals in the industrialized world are now slowly changing over from intravenous to oral rehydration methods as a first line treatment for dehydration.

The deficit is therefore not primarily in the technology, nor in the finances, nor in the outreach capacity. It is in the awareness that the job can be done and in the determination to mobilize all possible resources to do it.

The commitment of a nation's political leaders will be necessary if this great potential is to be unlocked, and a *Summit for Children* could focus that commitment as the 1990s begin. But leadership of all kinds at all levels – from the worlds of religion, politics, education, health, media, art, commerce, labour, public service, entertainment, and people's movements – is also essential if families everywhere are to be informed and supported in using today's knowledge to improve their own and their children's lives.

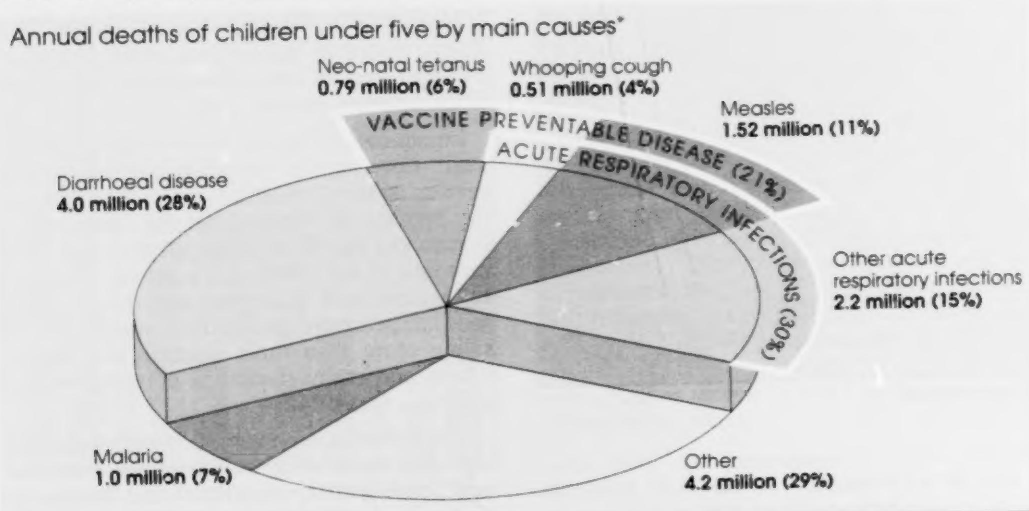
For the proposed *World Summit for Children*, and for all those who become involved in responding to this great challenge, what follows is a brief summary of the *six major opportunities* to protect the lives and the normal growth of children in virtually every developing country in the decade ahead.

1. Universal child immunization

Despite the rapid progress of the 1980s, immunization remains one of the greatest of all of those opportunities. Two thirds of all the children in the developing world have already been reached by vaccines and approximately 2 million

Fig. 4 Causes of child deaths

Almost two thirds of the 14 million child deaths each year are accounted for by just four specific causes – diarrhoea, respiratory infections, measles, and neo-natal tetanus. The great majority of these deaths could now be prevented at very low cost.



* For the purposes of this chart, one cause has been allocated for each child death. In practice, children often die of multiple causes and malnutrition is a contributory cause in approximately one third of all child deaths. Measles deaths are sometimes ascribed to acute respiratory infection as a severe case of measles renders a child highly susceptible to other infections and pneumonia is often the ultimate reason for a death for which measles is primarily responsible.

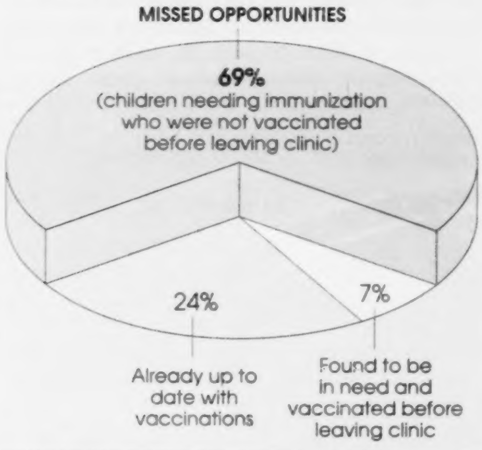
Source: WHO and UNICEF estimates.

lives are being saved each year as a result. But approximately 3 million children are still dying each year because they have not been immunized and because disease, malnutrition, and death are more common among those children who have not yet been reached. It is therefore essential to maintain the momentum and reach 80% immunization coverage by the target date and over 90% coverage as soon as possible thereafter (panel 1).

Fig. 5 Missed opportunities

The target of 80% immunization coverage could be achieved if all children who are brought to clinics – for whatever purpose – were screened and immunized if necessary.

Results of typical 'missed opportunities survey' (children attending clinics for other purposes who were not screened for immunization)



Source: WHO, 1989.

For all vaccines, and in almost all countries, there are today two outstanding opportunities for levering immunization coverage to 80% or more within the next twelve months (panel 6). Fig. 5 shows that coverage could be quickly expanded by screening every child who is brought to a health clinic, for whatever purpose, to see if immunization is necessary. Similarly, immunization records consistently show that 80% coverage could be reached if all children who receive a first dose of vaccine were to complete the *full course*. Exploiting these two opportunities, by alerting all health staff to the need to take every opportunity to immunize and by alerting all parents to the need for a full course of vaccines, would quickly lift coverage by many percentage points and at relatively little extra cost. It is in the elimination of wasted opportunities and the better use of existing staff and facilities, rather than in any separate service or new delivery initiatives, that the greatest gains are now waiting to be made.

It is a matter of particular concern that the two biggest killers among the vaccine-preventable diseases – measles and neonatal tetanus – are the two for which immunization lags furthest behind.

Measles still claims 1.5 million young lives each year, and these deaths are but the mortality tip of a morbidity iceberg. Other illnesses and malnutrition are now known to be up to ten times more common in the months and years following a measles outbreak (panel 5).

Measles is therefore one of the single most deadly threats to the children of the 1990s and universal measles immunization must remain one of the decade's greatest goals.

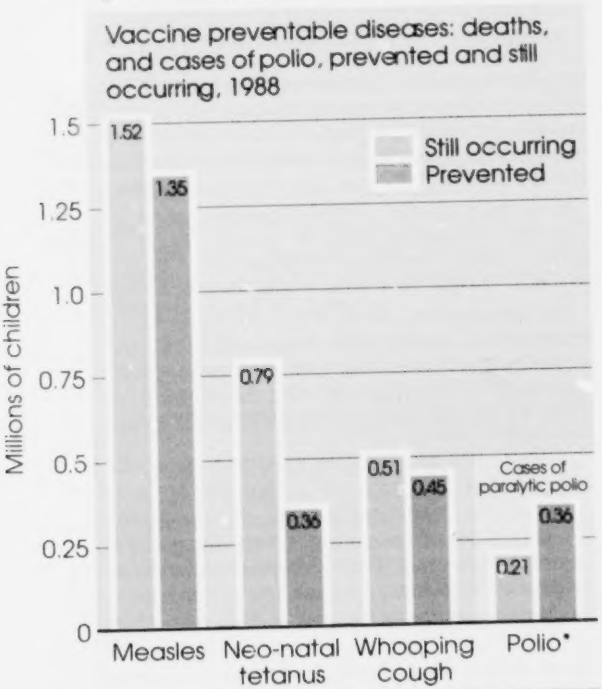
Immunization against tetanus also trails behind. Coverage of pregnant women in the developing world still stands at less than 30%, and the number of recorded tetanus cases among women and new-born babies has therefore fallen very little in the 1980s. It is a matter of national and international shame that something so easily and inexpensively preventable should still be killing more than three quarters of a million infants and many thousands of young women each year (panel 5).

The problems are many. Economic recession, high fuel costs, weak infrastructure, staff shortages, problems of temperature and terrain – all of these make the job of universal immunization difficult. But the 1980s have shown that high coverage can be achieved even in the poorest nations and even in the most difficult of economic times. Progress has been sharply accelerated, for example, in 41 out of the 46 low-income African countries in the last five years despite all the continent's difficulties. And in China, still among the poorest twenty countries in the world, immunization coverage has already reached 85% in *every province* and over 95% nation-wide for polio, DPT, measles, and BCG vaccines.

The cost of immunization programmes is not prohibitive for any country. The crucial factor is a sustained commitment to the immunization cause.

Fig. 6 Vaccines prevent two million deaths a year

Over two million child deaths a year are now being prevented by vaccines, but almost three million children are still dying, annually, from vaccine preventable disease. Tetanus toxoid immunization (to protect the mother-to-be and her new-born child) lags disastrously behind.



* The large increases in the number of polio cases prevented, over the last year, is caused mainly by the surge in polio immunization in China, where coverage has reached almost 95% in 1989.

Source: WHO and UNICEF: UCI Reports.

Immunization has depended, and will depend, on the often unrecognized commitment of people in every country who have communicated with the parents, wrestled with the logistics, driven the vehicles, maintained the refrigerators, organized the clinics, and vaccinated the children.

But in the difficult years of the 1980s, the mainspring of immunization's expansion has been the political commitment, at the highest levels, which has enabled national resources to be mobilized on the scale required.

It is safe to say that never before have so many Presidents, Prime Ministers and senior political leaders been personally involved in the promotion of any public health initiative. Ministries of the Interior, of Education, of Information, as well as Ministries of Health, have shared in the achievement and many Heads of State have maintained their involvement by asking to see quarterly progress reports from their ministers, provincial governors, or senior health officials. As the World Health Organization has said, "*social value systems have been changed so that immunization is now recognized as a high priority by both national and international leaders*".

That recognition is what has made possible the achievement so far. Clearly, it is also important for political leaders to know that immunization services must be permanent, that continuous investment is required, and that immunization programmes must both strengthen, and be strengthened by, the infrastructure of primary health care. But the commitment to particular and achievable goals has a crucial part to play, and nothing is as likely to accelerate progress towards other goals as success in reaching the goal which is now within reach.

In sum, the immunization target can be achieved. The lives of 3 million more children a year can be saved from measles, whooping cough, and tetanus. The pneumonia, diarrhoea, vitamin A loss, malnutrition and nutritional blindness caused by measles can be largely prevented. Polio can be eradicated. It is not now a question of whether it is physically or financially possible: it is

4

Egypt: shots and salts

Egypt is the first country to achieve outstanding success in simultaneously promoting two major child survival interventions – oral rehydration therapy (ORT) and immunization – thereby preventing the deaths of many tens of thousands of children annually.

In 1984 the Ministry of Health launched a nationwide programme, assisted by USAID, to promote the use of oral rehydration salts (ORS) and continued feeding (especially breast-feeding) during episodes of diarrhoea.

Over 40,000 doctors, nurses and pharmacists have since been trained in oral rehydration, which is now part of the curriculum of all medical schools. All government health facilities dealing with children now provide ORS free of charge, and 3,200 facilities (85%) have special oral rehydration centres where mothers learn how to prepare and administer the solution. ORS is also sold, without prescription, in over 6,000 private pharmacies.

Local production of ORS, distributed in convenient 5.5 gramme packets, increased from 2.3 million litres annually in 1982 to 5 million litres in 1987.

The mass media of television, radio and newspapers have played a decisive role in boosting public demand for ORS and in educating mothers in its correct use. Knowledge of ORS is now almost universal among Egyptian mothers, and surveys show that more than 80% can mix the solution correctly. At least half of all cases of childhood diarrhoea are now treated with ORS, compared with an estimated 10-20% in 1983. Feeding practices have also improved, although about one in seven mothers still stop breast-feeding when their babies have diarrhoea.

Egypt has also made a major contribution towards meeting the United Nations goal of *Universal Childhood Immunization* by the year 1990. By 1988 over 80% of the country's young children were immunized against the six main vaccine-preventable diseases of childhood, following a large-scale social mobilization campaign involving the nation's imams and other religious and community leaders. As in many other countries, however, neonatal tetanus was still a serious problem. Only 12% of pregnant women were receiving two doses of tetanus toxoid – which protects both the newborn and the mother – during pregnancy.

The Government decided to organize a special campaign, led by the Minister of Health and targeted on an estimated one million pregnant women, during the last two months of 1988.

In urban areas, many non-governmental organizations mobilized their members in support of the campaign. Girl Guides, government social workers, and university graduates doing public service were also enlisted. Training courses for traditional birth attendants gave special emphasis to immunization against neonatal tetanus.

As in the promotion of ORT, television played a crucial motivational role. A popular young actress, 'Hend', became a living symbol of the campaign through her television appearances.

The campaign was far more successful than its organizers had dared to hope. A total of 821,505 women received two doses of tetanus toxoid and another 287,000 received one dose. By the end of 1988, 82% of pregnant women were fully immunized against tetanus.

In drawing lessons from Egypt's success in promoting ORT and immunization, it is important to bear in mind that over 90% of the population have access to television, and nearly 100% live within reasonable distance of government health centres and private pharmacies.

Equally important, however, is the role of the country's political leadership. The commitment of President Hosni Mubarak and the personal involvement of the First Lady, Mrs Suzanne Mubarak, have been crucial in mobilizing official and public support for these practical means of protecting the lives and healthy growth of the country's young children.

a question of whether there is the political commitment, at the highest levels, to see the task through.

The immunization of 80% of children would therefore provide the first specific challenge for a *World Summit for Children* and the first test of whether national leaderships are prepared to act decisively to protect the children of the 1990s.

Major killers

It is that same political commitment which is required to liberate the potential of the other equally powerful and equally low-cost means of protecting the lives and the growth of children as the 1990s begin.

Two of the most important of those means are oral rehydration therapy (ORT) and antibiotics.

In almost every developing country, diarrhoeal disease and respiratory infections are the first and second most common causes of illness and death among the under fives. Together they claim over 16,000 young lives *each day*.

As with vaccine preventable infections, the hour has now come to put an end to the dominance of these two diseases over the lives of so many millions of children.

As the 1980s have demonstrated, the most striking aspect of these two sets of infections is that both could now be defeated at little cost through the substitution of *good therapy for bad*.

Because diarrhoea and coughs and colds are the most common illnesses of childhood, the parents of the developing world are already spending an estimated $1 billion each year on anti-diarrhoeal drugs, cold remedies, syrups, decongestants, and similar products, almost all of which are ineffective. That same amount of money would be enough to pay for effective treatment – if it were available – and to save many millions of children's lives each year.

For both diarrhoeal disease and respiratory infections, the change from bad therapy to good must begin in the home. It is the right of all parents to know how to react rationally, in the light of today's knowledge, when their children are ill. And if parents can be reached and persuaded by invalid messages about ineffective medicines, then it must also be possible to reach them with accurate information and low-cost treatments which will genuinely protect their children's lives and health.

To protect children from life-threatening and nutritionally damaging bouts of diarrhoeal disease, parents need to know the essentials of both prevention and treatment. Using all possible channels, all families should be informed that diarrhoeal disease can be *prevented*. It can be prevented by breast-feeding, by having children fully immunized, by using latrines, by keeping food and water clean, and by washing hands before touching food. Similarly, many respiratory infections can be prevented by breast-feeding, immunization, and safe weaning.

In the context of poverty, and in the absence of basic services such as water supply and safe sanitation, not all families will be able to act on that information. But that does not mean that they do not have the right to know why it is that their children are so often ill or what it is that they themselves can do about it.

When illness does strike, parents should know that food and liquid are essential. It is not diarrhoea itself but the accompanying dehydration which kills two million children each year*. And it is not anti-diarrhoeal drugs but oral rehydration salts (ORS), breast-milk, gruels, soup, rice water, fruit juices, tea, coconut water, and clean water itself which can prevent that dehydration in almost all cases.

It is also vital that parents know when an episode of diarrhoea or a cough or cold has reached the point where the child's life is threatened. Most mothers know when diarrhoea has become more serious than usual. Apart from the frequency of watery stools, specific signs of dehydration are sunken eyes, extra thirst, and no tears when the child cries. At this point, *help is needed*. Similarly, any parent of a child with a cough or cold needs to know the one symptom which means that the child's life is in danger. Scientists are now agreed on that one symptom. If a child is having difficulty in breathing or is *breathing much more rapidly than normal*, then it is essential to get the child to a clinic immediately.

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* Of the estimated 4 million child deaths per year from diarrhoeal disease, approximately 60% are now caused by dehydration and are therefore susceptible to ORT.

Thereafter, replacing bad therapy with good depends on improving health services, and on health workers who have the up-to-date knowledge and the low-cost technologies to prevent death from dehydration or respiratory infection.

In the case of diarrhoeal dehydration, the technology required is a 10-cent sachet of ORS which all health workers can keep in stock and which all parents can be taught how to use. In the case of acute respiratory infections the technology is a course of antibiotics, taken orally, and usually costing less than $1.

These two technologies, with the capacity to save up to 4 million lives each year, are two of mankind's most powerful instruments for the protection of its children. It is therefore essential that all health workers are empowered to use them. Yet most community health workers today are forbidden to prescribe antibiotics and most have not been trained to use ORT. The training of all health workers in the use of ORT and antibiotics is therefore perhaps the greatest public health priority of the 1990s. And it is the path by which almost every single developing country could reduce child illness and child deaths on a significant scale in the decade ahead.

2. Oral rehydration therapy (ORT)

At the moment, according to a 1988 WHO report based on evidence from 46 countries, only 14% of doctors, 4% of nurses, 8% of paramedics, and 9% of community health workers have been trained to use oral rehydration therapy – despite unanimous expert acknowledgement that it is "*potentially the most important medical breakthrough this century*"[10].

Some countries have made progress in training health workers to use the therapy – notably Brazil, Colombia, Egypt, Lesotho, Mexico, Pakistan, Peru*, the Philippines, Sudan, Thailand, Viet Nam and Zaire. Even more widely, many nations have begun to put today's knowledge about preventing diarrhoeal dehydration at the disposal of parents. After a decade of such efforts, one third of the developing world's families know about the breakthrough and are attempting to put it into practice (fig. 7).

The result is that an estimated 1 million lives are now being saved each year.

On the part of all those individuals who have been involved in promoting ORT over the last decade, the saving of one million lives each year is an impressive achievement. But more than 2 million children are still dying each year from diarrhoeal dehydration when an effective low-cost therapy has been available for nearly twenty years.

The question which would face a *World Summit for Children* is therefore whether or not the obvious thing will be done – will ORT be made as available and as well known as Coke and Pepsi or will we watch 25 million more children die of dehydration in the decade ahead?

The answer to that question will be one of the most obvious tests of any broader commitment to the principle of first call for the children of the 1990s.

3. Acute respiratory infections

Similarly, the question of whether antibiotics are to be made more widely available through primary level health workers is a question which must be resolved before the 1990s are more than a year or two old.

There is still debate about this issue. But WHO and UNICEF believe that enough evidence has now been accumulated to show that hundreds of thousands of children's lives could be saved each year if community health workers were trained in and entrusted with the use of simple, basic first-line antimicrobials such as cotrimoxazole which are inexpensive, easy to store, and likely to be effective in the majority of cases.

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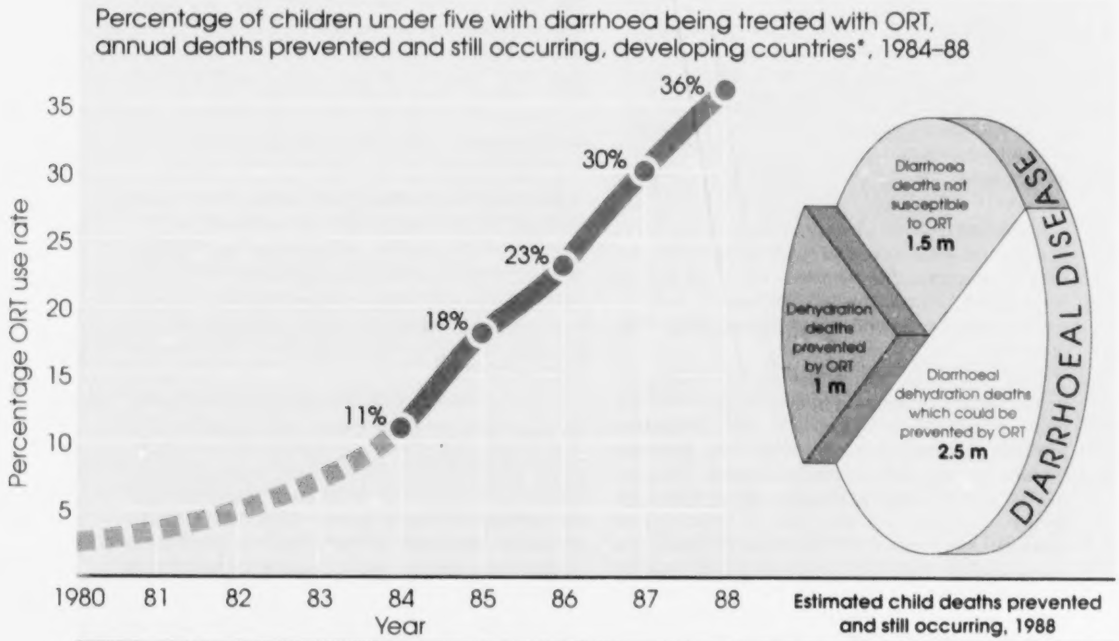
* In Peru this year (1989) 4,000 volunteers, elected by community organizations, have been trained to manage community oral rehydration units.

In some countries, it will mean changing the law. In almost all countries, it will mean changing conventional medical wisdom. But the time has surely come to grasp the nettle of residual medical resistance. It was in 1973 that it was first demonstrated, in the Punjab, that child deaths from pneumonia could be almost halved at very low cost by training village health workers to diagnose severe infections and to treat them with penicillin. Since then the diagnostic breakthrough has been made that a child with a cough or cold who is breathing more than 50 times a minute (or more than 40 times per minute if over one year old) is a child whose life is threatened. A parallel advance in treatment is the confirmation of the effectiveness of orally taken antimicrobials.

Fig. 7 The spread of oral rehydration therapy

Low cost oral rehydration therapy (ORT) can be used to prevent or treat the dehydration, caused by diarrhoea, which is the single most common cause of death among children under-five.

Almost unknown at the beginning of this decade, ORT is now being used by one in three of the developing world's families and is preventing an estimated one million child deaths every year.



Percentage of children under five with diarrhoea being treated with ORT, annual deaths prevented and still occurring, developing countries*, 1984–88

For the purposes of this chart, ORT includes the use of both sachets of oral rehydration salts (known as ORS), recommended mainly for the treatment of dehydration, and also home-made solutions of salt and sugar or other fluids which are recommended for the prevention of dehydration.

Source: WHO (CDD) and UNICEF estimates.

* Excluding China.

Measles and tetanus: priorities for the 90s

The two biggest killers among the vaccine-preventable diseases are the two for which immunization lags furthest behind (fig. 3).

Measles accounts for half of the almost 3 million vaccine-preventable deaths each year. But it has become clear in the 1980s that measles is also one of the major causes of child malnutrition, that it precipitates vitamin A deficiency, and that it is associated with more frequent or more severe illnesses of other kinds in the post-measles period. According to recent studies, the incidence of illness and death in the months following an outbreak of measles can be ten times greater among those children who contracted the disease than among those who did not.

Measles immunization is therefore a multiple weapon. As the Director-General of the World Health Organization (WHO) has said:

"One single measles immunization can not only prevent measles and the malnutrition that follows, it also reduces the number of pneumonia cases by 25% and diarrhoea deaths, in some areas, by 15%."

Eradication will not be easy, and no industrialized country has yet succeeded in achieving it. Extraordinarily infectious, the measles virus is capable of singling out the unvaccinated child even in communities where the general immunization level is 80% or more.

Only one dose of the vaccine is needed to protect against measles, but the timing of that one dose is critical. The mother's own antibodies provide protection for her child in its first few months of life. Vaccinate too early, and the mother's antibodies may render the vaccine ineffective. Vaccinate too late, and the child may be exposed to measles in the time between the wearing-off of maternal protection and the date of vaccination. At the moment, the recommended compromise is to immunize children as close as possible to the age of 9 months.

A different measles vaccine – the Edmonston-Zagreb strain – given in high doses, may be effective from the age of 6 months and, if proven, will be added to the World Health Organization's recommended list.

In many countries, measles vaccine has only recently been introduced. But because immunization systems already exist, three quarters of the developing world's young children should be protected within the next twelve months.

Tetanus is currently killing over three quarters of a million new-borns each year – and unknown numbers of young mothers. Yet all that is required is that tetanus spores be kept out of contact with the healing umbilical cord. Elementary hygiene at the time of birth therefore prevents all cases. Alternatively, or better still additionally, the immunization of pregnant women with two doses of tetanus toxoid also gives complete protection to both mother and new-born child. As tetanus spores are found in soil, there is no such thing as herd immunity and no such thing as eradication. Every single woman must therefore be reached.

Tetanus immunization lags badly. Fewer than 30% of the developing world's women are immunized and the number of cases and recorded deaths has fallen very little during the last decade.

It is a specific failure which exposes a general weakness. The Director of WHO's Expanded Programme on Immunization, Dr Ralph Henderson, comments:

"The continuance of neonatal tetanus represents a major failure of public health practice. It is one of the most dramatic and angering indications of our wider failure to provide basic maternal health services. Not one case of neonatal tetanus should be allowed to occur. Before 1995, the disease should be eliminated in every country. We have a good, stable vaccine and it could and should have been done yesterday".

Egypt has already demonstrated what can be achieved. At the end of 1988, a two-month campaign boosted tetanus coverage of pregnant women from 12% to over 80% (panel 4).

Reviewing six pilot studies in India, Indonesia, Nepal, Pakistan, the Philippines and Tanzania, Dr. Felicity Savage has summed up the present position:

"*Taken together, the studies show that PHC workers can be trained to watch a child breathing, to observe fast breathing and chest indrawing, to apply the simple management protocols, to give oral antibiotics, and to explain supportive care to mothers. With regular supervision, PHC workers do use antibiotics responsibly, without abuse or over-use. . . .*

"*Although some questions remain, the results now available provide additional evidence to justify the inclusion of acute respiratory infection control in primary health care (PHC) programmes. This may also increase both the credibility of PHC workers and the acceptability of PHC programmes*".[11]

Dr. Savage adds:

"*Although the studies differ in design, and some of the results are still preliminary, they all point the same way. They suggest that improved case management of acute respiratory infections could reduce child deaths from pneumonia by at least 20% and probably in many situations by 50-70%*".[12]

One of the six studies, sponsored by UNICEF and conducted in the three years up to 1987 on the outskirts of Kathmandu, saw child death rates from acute respiratory infections fall by almost 60% in the first year and by a further 25% in the second year[13]. The principal tools were health education, immunization, and antibiotics made available through community health workers.

The studies will continue. But the time has now come to act on what we already know.

Oral antibiotics and ORT have been of proven effectiveness for two decades, during which time approximately 100 million children have died from illnesses which these two interventions can treat or prevent. How much longer are children going to have to wait?

It is as if a cure had finally been found for cancer but then little used for twenty years. Diarrhoeal disease and respiratory infections kill more people than all the different cancers put together, and most of their victims are not over 50 but under 5. The decisive difference, to be explicit about it, is that the victims of diarrhoeal dehydration and respiratory infections are predominantly the children of the *poor*.

We have the knowledge and the low-cost means of drastically reducing the impact of diarrhoeal disease and acute respiratory infections – the two most common causes of death and illness among the children of almost every developing country. And in view of the rate of progress so far and the consequences of further delays, it is reasonable to suggest that heads of state and their senior advisers should now take a personal interest in the delay. When a hundred of a country's citizens are killed in a plane crash or a rail accident, the event can be sure to demand the attention of press, public, and politicians. When 4 million children a year are killed because two known and inexpensive solutions have not been made available, then this too ought to be worthy of the attention of nations and the intervention of political leaders.

Applying these solutions on the same scale as the problems would therefore be one of the most important and obvious agenda items for a *Summit for Children*. For it is clear that high-level political intervention is now necessary to overcome the obstacles, set the goals, and mobilize the resources to apply these known low-cost solutions to these known high-cost problems.

4. Breast-feeding

Alongside the prevention and treatment of diarrhoeal, respiratory and vaccine-preventable diseases, the issues of *breast-feeding* and *birth spacing* also claim a place among the six most crucial specific factors for the protection of children in the decade ahead.

Breast-feeding appears to be on the decline in many developing nations as commercial pressures, the use of milk powder and feeding bottles in hospitals (panel 7), and the increased participation of women in the labour force, all conspire to make bottle feeding seem the attractive option.

The continuation of this trend would be disastrous.

It has been consistently demonstrated, over many years and in many nations, that bottle-fed infants contract far more illnesses and are as much as 25 times more likely to die in childhood than infants who are exclusively breast-fed for the first six months of life. In those early months, even supplementing breast-feeding with powdered milk can bring a ten-fold increase in the risk of death[14].

That risk increases with poverty. In deprived and often illiterate communities, expensive powdered milks are often overdiluted with unsafe water and fed to infants from unsterilized feeding bottles. Malnutrition and infection result. Breast-feeding, by contrast, is nutritionally perfect, always hygienic, promotes healthy growth, 'immunizes' infants against common infections, helps prevent dehydration, and reduces the severity of respiratory infections.

A minority of nations have acted on these facts by launching public information programmes and by enacting into law the WHO/UNICEF *International Code of Marketing of Breastmilk Substitutes*, which is designed to promote the advantages of breast-feeding and to prevent the irresponsible promotion of feeding bottles and powdered baby milk. It is a low-cost option for reducing both child deaths and child malnutrition in the decade ahead, and it is an option open to the political leadership of all nations.

Second, frequent and on-demand breast-feeding suppresses ovulation for several months after a birth and so prevents or postpones the next pregnancy. Regardless of any effect on overall fertility, the benefit to mother and child of spacing births at least two years apart is in itself one of the most important and least-known issues in public health. Breast-feeding helps to confer that enormous health advantage.

5. Birth spacing

Figure 8 illustrates the importance of birth spacing for improving the health of both women and children. It shows that the majority of deaths happen when births are more than four in total, or are closer together than two years, or are to women who are younger than 18 or older than 35.

Empowering people with knowledge about the importance of timing births, and enabling them to act on that knowledge by providing culturally acceptable methods of family planning, therefore command a place among today's outstanding opportunities for protecting the lives and the health of many millions of women and children.

As well as considering how these facts might be made more widely known, national leaderships might also wish to consider their implications for the question of the legal minimum age at marriage. Cultural differences and traditional values make this a difficult and sensitive issue. But today's knowledge suggests that the chances of a woman dying in childbirth, or of a baby dying in infancy, are perhaps 50% greater if a woman becomes pregnant before the age of 18. By that age, 50% of girls in Africa and 40% of girls in Asia are already married.

Family planning is a controversial issue which generates passions and principles on all sides. But it touches and is touched by so many other facets of human progress that it simply cannot be ignored. There are today 300 million couples in the developing world who do not want any more children but who are not using any effective means of limiting family size[15]. A strong demand for planning births therefore already exists. If that demand were to be met, then a number of major gains could be made:

First, there would be a steep reduction in the more than 100,000 illegal abortions which are now performed *every day of the year* and in the 500 deaths of young women which are the *daily* result[16]. The suffering is unimaginable. Its continuance is unconscionable.

Second, there would be a significant improvement in the health of many millions of women who would be relieved of the enormous physical and mental burdens of having too many children too close together or at too early or too late an age. An estimated half a million women die every year of causes related to childbirth and a majority of those deaths could now be prevented by the well-informed spacing and timing of births.

Third, the lives of the children who *are* born would be immeasurably improved. Not only would child death rates fall, perhaps by as much as a third, but the quality of child care, of health, nutrition, and education, would inevitably rise as parents were able to invest more of their time, energy and money in a smaller number of children.

Fourth, population growth would be slowed. Evidence from the *World Fertility Survey* suggests that if women who do not want to become pregnant were empowered to exercise that choice then the rate of population growth in the developing world would fall by approximately 30% (fig. 9). Meeting the existing demand for knowledge about birth planning would therefore also contribute to an improvement in per capita incomes and a reduction in environmental pressures.

With so many substantial advantages to be had from the meeting of an existing demand at an affordable cost, the promotion of the knowledge and the means of timing births also lays claim to consideration as one of the first priorities of the 1990s.

6. The attack on malnutrition

The last item on this agenda of specific actions for the children of the 1990s concerns the progress that could now be made in improving child nutrition.

The roots of malnutrition are so deeply embedded in the soil of poverty, it is often argued, that only economic development can loosen their grip. But such a response amounts to little more than opting out of the problem.

First, it is simply unacceptable that over 150 million children under five should suffer from malnutrition in a world which has the capacity to prevent it (fig. 10).

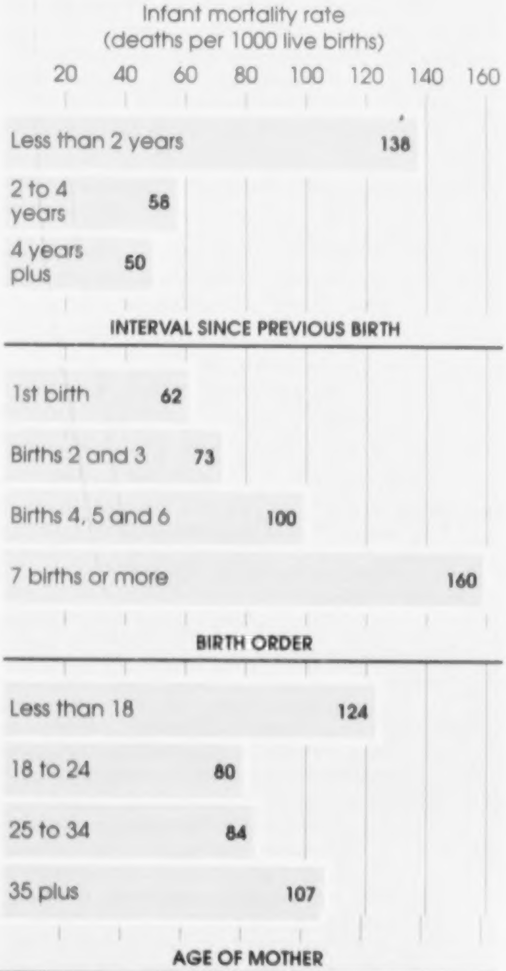
Second, malnutrition impairs the physical and mental development of children and the working and earning capacity of adults; it is therefore a cause as well as a consequence of poverty.

Third, several countries have managed to reduce malnutrition drastically, even though per capita incomes remain low.

Fig. 8 Timing births and saving lives

Birth spacing is one of the most vital of all factors in the health of both mothers and children. Both infant and maternal deaths are heavily concentrated among those births which are 'too many or too close' or to mothers who are 'too young or too old'.

Infant mortality by age of mother, birth order, and interval between births, Brazil, 1976–86



Source: Institute for Resource Development, Demographic and Health Surveys, Columbia, Maryland.

Missed opportunities: for 80% immunization

For all vaccines, and in almost all countries, there are today two outstanding opportunities for levering immunization coverage to 80% and more within the next twelve months. Both could be exploited at almost no extra cost and both depend on making better use of existing resources rather than on major new expenditures.

Figure I shows the result of a typical 'missed opportunity survey' at a child health clinic. It shows that almost 70% of children who needed vaccination but *who were brought to the clinic for some other purpose* were sent home without being immunized.

For all immunization programmes, bringing the child into contact with a clinic is more than half the battle. Screening all children who are presented at clinics, for whatever purpose, and either vaccinating them or referring them for vaccination, is therefore a way of quickly increasing vaccination coverage using existing staff and facilities. The scope for taking up this slack has been shown by clinic surveys revealing missed opportunity rates of 68% in Thailand, 57% to 81% in India, 54% in Nepal, 45% in Honduras, 45% in Pakistan, and 41% in Ethiopia.

As these figures suggest, the goal of 80% immunization could almost certainly be reached, in almost all countries, if no child in need of immunization were allowed to leave a health centre or clinic without either being vaccinated or referred for vaccination. In the past, there has been resistance to the idea of immunizing children who are brought to clinics with other symptoms such as diarrhoea, respiratory infections, or moderate malnutrition. Even in immunization clinics this misinformation has often meant that 20% or more of children are sent home without being vaccinated. It is now a matter of priority that all children are screened for immunization at every visit to a clinic and that all health personnel are updated with the information that illnesses and undernutrition, unless very severe, are not valid reasons for withholding immunization.

The second of the two major opportunities for moving rapidly towards 80% coverage is to reduce current drop-out rates. If all children who receive a first dose of vaccine were to complete the full course, then the 80% target would already be reached in most nations. As the World Health Organization has said this year:

> “*In almost all countries, far more can be done to increase coverage immediately, using the health staff facilities that are already in place; many children who receive a first dose of vaccine are at present failing to return for subsequent doses. Coverage levels which reach 60% for a third dose of oral poliovirus or DPT vaccines indicate that some 80% of children have already had contacts with health workers for a first dose; with better health education and follow-up, supported by social mobilization, the majority of these children can be fully immunized*”

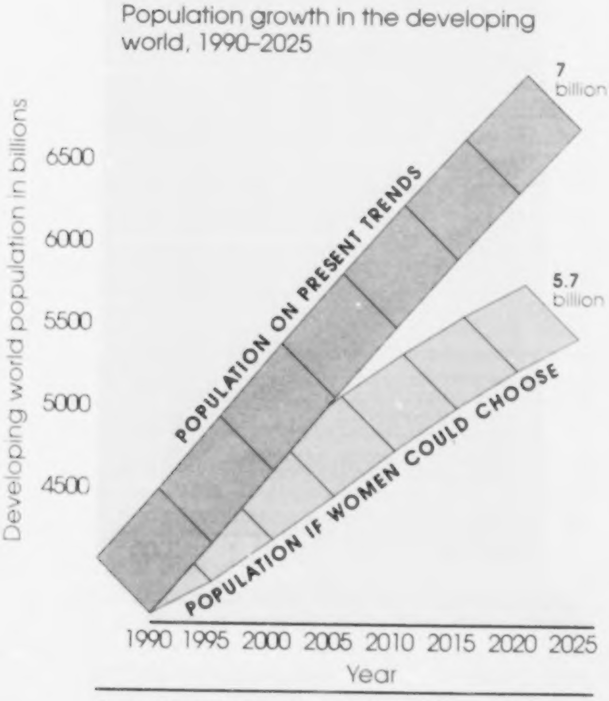
In other words, the *demand* for immunization is as important as the supply.

Many times in the 1980s, the approach known as social mobilization – using the whole of a society's organized resources including the schools and the mass media, the religious leaders and the voluntary associations, the business community and the trade unions, the women's organizations and the community associations, the entertainers and the youth movements – has proved its potential for putting vital health information at the disposal of the majority and driving the 'supply side' of the equation. Over the next twelve months and beyond, this kind of social mobilization could ensure that all parents appreciate the urgent need for a *full course* of vaccinations during the first year of a child's life.

Ending malnutrition is therefore not just a question of time and economic development, it is a question of policy and commitment. As Alan Berg, nutrition adviser to the World Bank, has written: "*The poorest cannot wait. A direct attack on malnutrition is needed as well, and governments willing to make that effort now have effective and affordable measures to make it happen*".

Fig. 9 If women could choose

This chart shows two projections of population growth in the developing world. The first is the normal UN 'medium variant' projection and the second shows what would happen if the women of the developing world could choose how many children to have. This second projection is based on the World Fertility Survey's finding that women would have an average of 1.41 fewer children if they were enabled to decide on family size. The difference amounts to approximately 1.3 billion more people in 35 years' time.



Population growth in the developing world, 1990–2025

Source: Ken Hill, John Hopkins University, School of Hygiene and Public Health using the United Nations and World Bank Population Projection Models.

For many parents, feeding children properly is made virtually impossible by famine, war, or absolute poverty. But one of the important advances in knowledge over the last decade has been the realization that much of today's malnutrition, possible even the majority, resides in homes where adequate food is available, and that the culprit is just as likely to be frequent illness, poor health care, and the lack of knowledge.

Common childhood illnesses – especially diarrhoea, measles, whooping cough and other respiratory infections – take away a child's appetite and lower food intake. Each illness also inhibits the absorption of food, burns up calories, and drains away nutrients in diarrhoea and vomiting. Each day of acute diarrhoea, for example, can reduce a young child's body weight by about 2%[17]. Measles can take away 7% of body weight in a matter of days[18].

In poor communities without either clean water or safe sanitation, it is not uncommon for children to have between six and twelve such illnesses a year. Malnutrition is the almost inevitable result.

For this reason, many of the priority actions already discussed in this report – and especially measles immunization, breast-feeding, and the prevention and proper treatment of diarrhoeal disease – *would also reduce child malnutrition.**

Apart from frequent illness, there are at least six causes of child malnutrition which have little to do with whether there is food in the home and much to do with the parents' knowledge of the child's nutritional needs.

The knowledge itself is not complicated. Every parent should know:

○ That breast-milk alone is the best possible food for the first four to six months of a child's life. It provides all the child's nutritional needs, it is always hygienic, and it 'immunizes' the child against common infections like diarrhoea.

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* Internal parasites also contribute to malnutrition and in many regions de-worming is a low-cost method of improving health and nutritional status.

○ That by the age of four to six months, the child needs other foods in addition to breast-milk. Introducing solid foods earlier increases the risk of infection; leaving it much later leads to malnutrition.

○ That a child under three years of age needs feeding twice as often as an adult with smaller amounts of more energy-rich food*. A bowlful of watery porridge or gruel is likely to fill a child's stomach and take away its hunger without meeting its proportionately greater energy needs. Staples can be enriched by mashing in small amounts of oil or fats, and a few greens.

○ That food and drink should not be withheld when a child is ill or has diarrhoea. Many mothers and many doctors believe in 'resting the child's gut'. But this is exactly the wrong thing to do. A sick child, and especially a child with diarrhoea, needs to be coaxed into eating and drinking frequently in small amounts. Breast-feeding is especially important.

○ That after an illness, a child needs extra meals to catch up on the growth lost. Any child will eat more when recovering from an illness, and at this time the body is programmed to put on weight more rapidly than normal. Paying special attention to frequent feeding in the week or two after illness can therefore help to make good the nutritional damage done.

○ That leaving at least two years between births, and making sure the mother-to-be has enough food and rest, is essential for the good health of the mother and for the nutritional well-being of the child. Too many births with too little time in between can cause anaemia, low birth weight and subsequent poor growth.

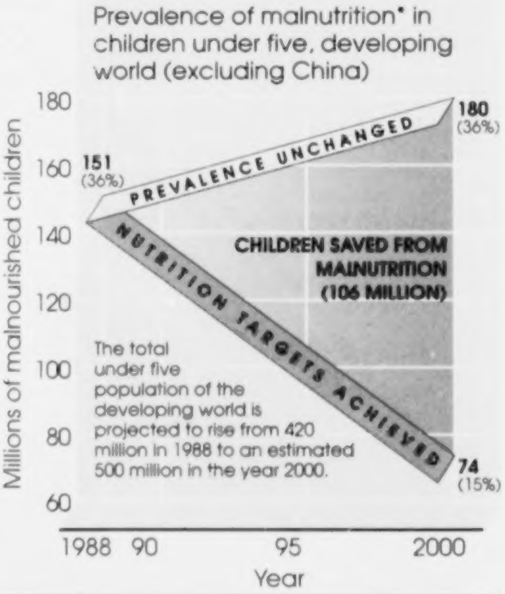
Practical steps towards ending child malnutrition could therefore be taken in the early 1990s by implementing low-cost methods of preventing and treating child illness and by mounting nation-wide efforts to put today's nutritional knowledge at the disposal of all parents.

All channels of communication can support that effort but, as with many other advances in health knowledge, it is the community health worker who can do most to inform and support parents in putting nutritional knowledge into practice.

Ideally, a community health worker should assist all mothers in the monthly weighing of all children under the age of three.

Fig. 10 Saving 100 million children from malnutrition

WHO and UNICEF believe that halving the rate of child malnutrition and eliminating severe malnutrition by the end of the century is a feasible target. The graph below shows the number of children affected by progress – or the lack of it – towards this target. Almost half of today's malnourished children live in the eight nations of South Asia.



* Malnutrition is here defined as more than two standard deviations below the desirable weight for age.

Sources: Beverley A. Carlson and Tessa Wardlaw, "Assessing NutritionalStatus in Young Children: A Global Analysis and Methodological Overview." Paper presented to the 47th Session of the International Statistical Institute, Paris, August–September 1989.

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* Although important for child nutrition, frequent feeding is often difficult for mothers who must work outside the home for long periods or for whom fuel and water are not readily available.

In any child, *growth* is the most important single indicator of health. If a child is regularly putting on weight every month, then there is unlikely to be anything fundamentally wrong. If the child is not gaining weight, something is very definitely wrong and action has to be taken.

The problem with this simple but all-important rule is that a child's growth is a slow process and that faltering growth cannot usually be detected, in its early stages, by either a mother or a paediatrician. That is why regular weighing and growth monitoring are so crucial. A mother who weighs her child every month and enters the result on her child's growth chart, with the help of a community health worker, is able to *see* growth or the lack of it. In this way, the first signs of any problem are made visible to the one person who cares most and can do most to prevent the child from becoming malnourished. A health worker can then discuss the possible causes with the parent. Is the child being breast-fed? Is powdered milk being over-diluted, or mixed with unsafe water, or fed from an unclean bottle? Has weaning begun? How many times is the child fed each day? Is oil or fat being added to the weaning food? Are green vegetables mashed in each day? Has the child been immunized? Does the child have frequent diarrhoea? Is food withheld? Does the mother know how to prevent dehydration? Is food kept clean? Are hands washed before eating and after using the latrine? Does the mother know about catch-up feeding after illness? Is there enough food in the house?

With only a few months' training, a health worker can perform these and many other vital services, putting at the disposal of parents not abstract education but timely, practical tips about the health and growth of their own children.

The potential of this approach has been proven in the 1980s. In Indonesia (panel 15), Thailand, and in the Tanzanian province of Iringa and the Indian state of Tamil Nadu, the regular monitoring of child growth and the education of parents has reduced malnutrition on a significant scale and at an affordable cost. The World Bank-assisted project in Tamil Nadu, for example, has reduced child malnutrition by approximately 50% in nine thousand villages at a cost of less than $10 per child per year[19].

The question of the availability and training of community health workers – a crucial common factor in putting into practice most of the specific actions discussed so far – will be discussed in chapter III.

But first, there is one other lever against the malnutrition problem which a nation's political leaders could now take into their hands.

Nutrition surveillance

If malnutrition is to be ended, then *nutrition surveillance* on a regular, nation-wide basis will almost certainly be necessary. Government policy across a wide spectrum – exchange rates, credit availability and interest rates, investment priorities, tariffs and duties, food subsidies, health services, infrastructure planning – can either alleviate or exacerbate the burden of malnutrition. Without a feedback mechanism, without accurate and up-to-date information on the effects of such policies on the nutritional well-being of children, it will be almost impossible to gear other social and economic policies to the task of ending malnutrition.

At the moment, very few nations have such information regularly at their disposal. But if the principle that the growing minds and bodies of children should have first call on a society's concern and capacities – in times of hardship as well as times of prosperity – is to be taken seriously, then some means of measuring success or failure will have to be put in place. There could be no more important measure of a nation's real progress. For it is a measure not only of the struggle against malnutrition today, but of the most essential of all investments in tomorrow.

Tracking the nutritional status of a nation's children, although not easy, is a good deal less difficult than tracking the health of a nation's economy. All countries produce frequent statistics on indicators such as import and export totals, inflation rates, and the growth in Gross National Product. It is time that the equivalent indicators were available, and with the same frequency, for the growth of children.

Breast-feeding: ten out of ten service

Breast-milk alone is the best possible food and drink for babies in the first four to six months of life. Yet in many parts of the world the practice of breast-feeding is in decline.

Maternity services, however unwittingly, have often contributed to this decline. Many hospitals and maternity clinics still stick to procedures which reduce the chances of a mother breast-feeding successfully. Too often, babies are separated from their mothers at birth and fed glucose water or formula by bottle and teat before the mothers' milk has 'come in'. Even one or two bottle feeds increase the risk that a mother will have difficulty breast-feeding.

Health workers can have a decisive influence on whether or not a mother decides to breast-feed and succeeds in doing so. Yet the knowledge, training and attitudes of many health workers do not equip them either to promote or to support breast-feeding. Many have insufficient knowledge of the benefits of breast-feeding to both mother and child. Few have been trained in how to help mothers start breast-feeding and cope with problems that may arise. Many feel that breast-feeding is outdated and inferior to the 'modern' technology of bottle-feeding.

Now, in a major new initiative to enlist the support of maternity services and health professionals world-wide, the World Health Organization and UNICEF have asked every facility providing maternity services and care for new-born infants to observe the *Ten Steps to Successful Breast-feeding*. The ten steps are:

○ Have a written breast-feeding policy that is routinely communicated to all health care staff.

○ Train all health care staff in the skills necessary to implement this policy.

○ Inform all pregnant women about the benefits and management of breast-feeding.

○ Help mothers initiate breast-feeding within a half-hour of birth.

○ Show mothers how to breast-feed and how to maintain lactation even if they are separated from their infants.

○ Give new-born infants no food or drink other than breast-milk unless medically indicated.

○ Practise rooming-in – allow mothers and infants to stay together – 24 hours a day.

○ Encourage breast-feeding on demand.

○ Give no artificial teats or pacifiers (also called dummies and soothers) to breast-feeding infants.

○ Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from hospital or clinic.

These ten points are universal in nature and apply equally to health facilities in the industrialized and the developing nations of the world.

Every mother who gives birth in a hospital or maternity clinic anywhere in the world should have the right to a '10 out of 10' breast-feeding service from doctors, midwives and nursing personnel.

To monitor existing practices – and as a spur to action – WHO and UNICEF are also distributing a 20-point check-list of practical steps which every hospital and maternity clinic can take to protect, promote and support the practice of breast-feeding. This list, along with the above Ten Steps, is available in a special booklet entitled *Protecting, promoting and supporting breast-feeding: the special role of maternity services*, published jointly by WHO and UNICEF.

If, in the 1990s, all governments were to institute the regular flow of such statistics*, and if politicians, press, and public, were to use them in the same way as quarterly economic figures are now used, then the policies to prevent malnutrition and the pressure to implement those policies would begin to mount. It is also possible that setbacks to the nutritional health of children, occurring as a result of the undiscriminating reduction of food subsidies or other attempts to adjust economies to the problems of debt and recession, would not pass unnoticed and unprotested as they have so often done in the 1980s.

To this end, UNICEF is now co-operating with the World Health Organization and the Food and Agriculture Organization to assist national governments in obtaining the required information. Data will be drawn from regular household surveys, birth weight records and school censuses, and based on three key anthropometric measures – prevalence of low birth weight, weight-for-age of children under three, and height of children at the age of entering primary school. Using these three indicators, and especially weight-for-age, it will be possible for governments to monitor the struggle against malnutrition, to evaluate policy, and to be regularly informed about what proportions of the nation's young children are seriously or moderately malnourished, in which regions, at what particular times of the year, and in which particular sectors of the economy.

Targeting food subsidies

National nutrition surveillance systems could also help in the shaping of one other instrument of nutrition policy. For those households where absolute lack of income or food is the basic problem, some kind of food subsidy will remain essential. No nation or economic system, not the United States, not the Soviet Union, not China, has ever managed to reduce malnutrition to very low levels without food subsidies of some kind.

But general food subsidies can quickly become a significant drain on resources, absorbing 10% or even 20% of government budgets in some countries, and they are therefore often the first items to feel the knife when governments begin to cut public spending. In the process of adjusting to debt and recession, the withdrawal of subsidies on food has been a common feature – and the one which has caused the most hardship, suffering, and understandable fear and anger among the poor.

In real terms, the value of food subsidies in Brazil, Colombia, Jamaica, Mexico, Peru, and many other nations has fallen during the 1980s. The very poor, who spend three quarters of their incomes on food, are obviously the most dependent. Yet when subsidies have been reduced, there has usually been no parallel attempt to refocus reduced resources on those most in need. And in all of the examples mentioned above, more than 50% of the remaining food subsidies are now accruing to the middle and upper classes*[20]. In other nations, particularly in Africa, foods such as meat and butter have been subsidized even though they are rarely seen by the poor and the malnourished.

The obvious conclusion from these experiences is that if food subsidies are to play a part in ending malnutrition, and if they are to be affordable and sustainable, then they must be better targeted to those in need.

It has often been argued that means testing and targeting is too difficult, too politically sensitive, too complex and expensive to administer. But recent experience has shown that here too practical progress is possible.

A national nutritional surveillance system would obviously facilitate targeting food subsidies to particular sectors of a country, or of a city, or even to particular seasons of the year.

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* Some countries, such as Botswana and Thailand, have already begun to monitor the nutritional status of their nations' children and to use the results to bring about nutritional improvements.

* If Brazil's $1.9 billion budget for food and nutrition programmes were made available only to the poorest fifth of the population, then it would amount to over $70 per person per year and make a substantial difference to family nutrition levels.

But even in the absence of timely national data, there are ways of matching resources with needs. In Africa, some governments are beginning to target food subsidies to the particular times of the year when the poor are trying to make 'the welding' between the end of one year's crop and the beginning of the next harvest. In Brazil, some subsidies are being made available only via small stores in the heart of the shanties and *favelas* where the poorest people shop and the better-off rarely venture. In other countries, subsidies are being made available only for particular foods which are bought mainly by the poor, such as sorghum, millet, or lentils. In places where large numbers of children regularly have their growth checked, as in Tamil Nadu, supplementary feeding can be made available specifically for those households where absolute lack of food is shown to be the rock-bed of the problem.

Vitamin A and iodine

Before leaving the question of the specific actions which can be taken against malnutrition in the 1990s, mention should be made of two other nutritional deficiency problems, neither of which should be allowed to survive the twentieth century.

For forty years, it has been known that the lack of vitamin A in a child's diet can cause irreversible blindness (panel 9). Only more recently has the scale of the problem been appreciated. Every year, a quarter of a million children are permanently blinded and another quarter of a million have their eyesight impaired by the lack of vitamin A. At least 100,000 of those children die within a few weeks.

More recently still, it has become clear that children deficient in vitamin A also suffer more frequent infections, anaemia* and poor physical growth. Even among children who are otherwise of the same nutritional status, those lacking in vitamin A are at significantly greater risk. According to Dr. Alfred Sommer, one of the leading researchers in this field, "*the great surprise is not the central role vitamin A plays in each of these areas but that this simple nutrient can so profoundly affect children who are subject to multiple adverse influences*".[21]

The deficiency can be prevented by informing parents that adding a small amount of the cheapest green leafy vegetables into their child's weaning food will help to protect his or her health and eyesight. Alternatively, a vitamin A capsule can be given to at-risk children every six months.

The cost of the capsule is 2 US cents. The cost of ignoring the problem will be the eyesight of over 2 million children in the 1990s and the ill health and poor growth of many millions more.

The second dietary deficiency which can and should be ended in the 1990s is the lack of iodine, which affects children mainly in mountainous or flood-prone areas where iodine is leached from the soil.

Iodine deficiency disorders sap the well-being and the productivity of tens of millions of adults and irreparably damage the mental and physical capacities of many millions of children. For decades it has been known that the problem can be overcome by the iodization of salt (panel 8) or, in special circumstances, by iodized oil injections.

The cost of taking up either of these options in the affected regions of the world, with a total population of perhaps 1 billion people, is not more than 10 cents per person per year. The cost of not taking up those options is that many millions of children will be born brain damaged in the decade ahead.

Doing the obvious

An intensified research programme would almost certainly yield other low-cost, high-impact strategies for protecting children (see panel 11), but this overview of the progress and potential of immunization, oral rehydration, antibiotics, breast-feeding, birth spacing, and strategies for improving nutritional health, has sought to show that effective solutions to the most important causes of illness, malnutrition, and death among the children of the 1990s are available and affordable *today*.

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* Anaemia itself is the most common of all micronutrient deficiencies. It too can be reduced at low cost through the effective treatment of malaria (a major cause of anaemia) and the distribution of iron and sometimes folate tablets to pregnant women and anaemic children.

UNICEF believes that they add up to a case for making the 1990s into a *Decade for Doing the Obvious*. And it is in search of a commitment to do the obvious on a sufficient scale that UNICEF has proposed a *Summit for Children*. For it is only the commitment of a nation's leaders, the awareness of a nation's people, and the mobilization of a nation's organized resources, which can put today's solutions into effect on the scale required.

The financial resources implied by these commitments are not large. If the back of the debt problem can be broken in the early 1990s, then the *additional moneys* required to seize the specific and obvious opportunities for protecting children, as discussed in this chapter, would be in the region of $2 billion to $3 billion a year by the mid-1990s. It would be a small price to pay for the saving of so many millions of young lives, for a drastic reduction in ill health and malnutrition, and for the fall in population growth rates which would result. Approximately half of that additional sum, or about $1 billion to $1.5 billion a year, might reasonably be expected to come from the industrialized nations if it could be assumed that these additional resources would be used for these specific purposes.

But it is equally obvious that the available solutions to major child health problems cannot be applied in a total vacuum. Permanent systems of communication, access to services, and practical support are necessary if today's health knowledge is to be truly put at the disposal of the majority. And this in turn depends in significant degree on the training of health workers, the development of primary health care systems, the availability of water and sanitation services, and the level of literacy and education among the population at large.

These are the dimensions of development which are most threatened by the process of adjustment to debt and recession and which the *Summit for Children* must also address. And it is to the question of what progress could be achieved in the 1990s towards these broader goals of social development that this report now turns.

Iodine deficiency: the ten years war

A new ten-year initiative backed by the United Nations holds out the hope of eliminating one of the world's leading causes of disability – iodine deficiency disorders (IDD).

Human beings need only a teaspoonful of iodine in their diet over a whole lifetime. But insufficient iodine can result in irreversible damage to brain and body. In high terrain and wherever rainfall or floods wash iodine from the soil, children grow up stunted, mentally retarded, apathetic, and incapable of normal movement, speech or hearing. Severe iodine deficiency at birth places children at risk of cretinism. Even mild deficiency shows up later in life as poor performance at school and poor productivity in adulthood, locking entire communities into a vicious cycle of ineducability and poverty.

Iodine deficiency also causes abortions, stillbirths and increased infant and child mortality.

An estimated 800 million people world-wide are at risk of iodine deficiency, with 190 million suffering from goitre, 3 million from overt cretinism and millions more from some intellectual deficit.

Adding iodine to table salt or water costs about 5 cents a person annually. For about 10 cents a year, injections of iodized oil provide up to five years protection, and capsules about two years' protection.

Nearly a sixth of the world's people stand to gain from these simple, low-cost measures: over 300 million in China, another 300 million in other Asian countries, 100 million in Africa, 60 million in Latin America, as well as small, isolated groups in Europe.

But the prevention of IDD has proved complex. Passing laws to iodize salt does not always mean that salt producers will comply. For a poor country, the expense of treating and packaging salt so that it retains the iodine may be substantial. And if cheaper, untreated salt stays on the market, few consumers will pay extra for iodized salt unless they are fully aware of the benefits. Communities affected by iodine deficiency, however, are often unaware that the problem even exists. A survey in Peru, for example, found that 60% of the population did not even recognize cretinism or goitre – the tell-tale swelling of the thyroid gland at the base of the throat – as health problems.

Yet fresh initiatives to combat IDD have shown how much can be achieved:

○ In Papua New Guinea, and parts of Indonesia, Bhutan, China and Nepal, programmes supplying iodized salt, together with iodized oil injections, have completely eliminated cretinism.

○ Nepal's vaccination teams are now taking iodine and vitamin A capsules to the most remote mountain hamlets.

○ In 1983 the government of Brazil began providing salt producers with free potassium iodate. Recent surveys in one State found that goitre rates in schoolchildren had dropped from 85% to under 10%.

○ In India, production of iodized salt has increased seven-fold since 1983 and the government is aiming to iodize all salt supplies by 1992.

○ Bolivia has quadrupled production of iodized salt since 1984 and is organizing salt producers' co-operatives to treat all the nation's salt by 1991. In the meantime the health services and 12,000 volunteers are distributing capsules of iodized oil through special campaigns. In August 1988, for example, iodine capsules were distributed to 1.5 million people – a quarter of the total population.

In March 1987 the United Nations announced the start of a ten-year campaign against IDD, stating that:

"A reduction of goitre rates to below 10% is entirely feasible within a decade. The prevention and control of IDD, because of its dramatic impact on the quality of life, productivity and educability of millions, would make a significant contribution to attaining the goal of health for all by the year 2000".

Priority to the poor

The undermining of social progress by the effects of the debt crisis has already been touched upon: clinics and schools have been closed, essential services have broken down, the incomes of the poor have fallen and so have their expenditures on food, schooling, and health care.

In such a context, it is sometimes argued, only a complete economic turn-around can make any fundamental difference to the well-being of the poor and their children.

While acknowledging the severity of the debt crisis and the urgent need for its resolution, UNICEF cannot accept the proposition that significant progress for children must await an improvement in the overall economic climate sometime in the late 1990s or in the early part of the twenty-first century.

Children cannot wait until our economic mistakes and omissions have been rectified. It is *now* that their minds and bodies are being formed and it is *now* that they need adequate food, health care, and education.

As chapter I of this report has argued, even a return to economic growth is no guarantee that children would have first call on that growth or that their essential needs would be met by it. What is also required is a new commitment to a style of development which Mahatma Gandhi called *antyodaya*, a development which gives priority to the poor and particularly to the health, nutrition and education of their children.

Such a commitment is necessary *in good times and in bad*. There is therefore no reason to 'wait for growth'. The time to begin building that commitment and translating it into efficient policies is now.

To be politically feasible, such a shift in development priorities would need, in most cases, the financial support of the industrialized nations. This question of increased aid and resources will be discussed in chapter IV of this report. But in trying to raise the level of social development, positioning the lever of policy is as important as increasing the force of the resources applied.

In particular, policy commitments to universal health care and universal education, the two great goals of social development, are of fundamental importance to today's children – and tomorrow's world.

Both schooling and health care act as multipliers on all other investments in development, not least on the efforts to improve child health discussed so far in this report. And in both, the experience of the 1980s has shown that there are practical and affordable steps which can be taken towards these great goals even in the difficult economic years of the early 1990s.

Health for all

A nation in which a third of the adult population is ill at any given time and in which a third of all children are failing to grow up properly in mind and body is a nation whose economic and social progress is being sapped from within. Yet many developing nations today are in exactly that position. And that is why it is now widely acknowledged that improvements in national health are a cause as well as a consequence of overall development.

Adequate food, clean water, and safe sanitation are still the three most powerful medicines in the world. And a job and an income are still the best possible guarantee that these needs will be met. Health cannot therefore be divorced from economic circumstance and the availability of basic services. But ill health among the adults and children of many developing nations today is far greater than would be dictated by economic circumstance alone*.

Food and nutrition have already been touched upon. Water and sanitation, the other two legs of the basic health tripod, pose one of the greatest challenges of the next decade: 60% of rural families and 25% of urban homes still lack safe water supplies. But formidable as the challenge may be, it is not an impossible one. Today's costs

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* Although there is a general correlation between per capita GNP and the major health indicators, many nations have achieved levels of life expectancy and under-five death rates which are far in advance of nations where per capita GNP is two or even three times higher.

Vitamin A: the story so far

Each year, at least 250,000 young children lose their sight for the lack of a small amount of vitamin A in their diet. As well as being the leading cause of childhood blindness in developing countries, vitamin A deficiency also reduces resistance to other infections and often causes anaemia and impaired growth.

Dietary lack of this essential vitamin is a serious health issue in at least 34 countries, including some of the most populous nations of Asia, Africa and Latin America. The problem can occur at all ages, but the most vulnerable are young children and pregnant or lactating women. World-wide, about 40 million pre-school children suffer from some degree of vitamin A deficiency.

Even when the effects on the eye are apparently slight, child health and survival may be seriously at risk. In Indonesia, children with only mild vitamin A deficiency were found to be several times more likely to die before six years of age; respiratory infections and diarrhoea were also more common than in children with adequate vitamin A intake. Those receiving regular vitamin A supplements had a 30% lower mortality rate. In Tanzania, also, the death rate among children with measles who received additional vitamin A during illness was markedly lower.

The World Health Organization (WHO) and UNICEF recommend that all children with measles in areas where the deficiency is common should be given high doses of vitamin A to increase their survival chances and prevent eye damage.

Combating the problem requires a package of measures combining health services, agricultural advice and nutrition education. Every mother also needs to know that breast-feeding will protect her baby as long as her own vitamin A levels are adequate, and that her children's diet must include green leafy vegetables or yellow fruits and vegetables, a little oil or fat (to assist absorption), and meat or dairy products if affordable.

Nutrition education requires a sustained national effort over many years. But the problem of vitamin A deficiency is urgent. Many countries are therefore trying to provide all pre-school children with massive doses of vitamin A, usually twice a year. In Indonesia, village volunteers distribute capsules at the monthly *posyandu* (panel H). In India, the *anganwadi* child care centres, which now serve well over one fifth of the nation's children, dispense doses of the vitamin in solution.

These remedies are inexpensive. Capsules supplied by UNICEF cost less than 2 cents.

WHO is now recommending that vitamin A supplements be added to vaccination programmes, which now reach the majority of young children in developing countries. Each contact with the immunization services should also be a chance for health workers to:

- provide children and mothers with vitamin A supplements
- treat eye problems due to vitamin A deficiency
- promote breast-feeding
- encourage the eating of foods containing vitamin A.

Countries such as Brazil, Guatemala, Haiti, Mauritania, and Indonesia have already linked immunization with vitamin A supplementation for short periods. The task now is to sustain these pioneering efforts and extend them to other countries where vitamin A deficiency is a serious health problem.

for providing safe water via stand-pipes varies between $2 and $5 per person per year. Total investment in water supply in the developing world now amounts to approximately $12 billion per year – of which $10 billion is devoted to services for the better-off at an average cost of approximately $600 per person per year.

Such figures illustrate the point that policies are as important as increases in resources. Even a small shift in the balance towards the poor, for example by planning for faster expansion of low-cost services in future programmes, could go a long way towards meeting the needs of all families for clean water and safe sanitation by the end of this century.

Primary health care

Turning to the health services, it has been clear for some time that significant gains in health are now possible even in the face of economic difficulty.

For the last decade, there has been virtual unanimity among the nations of the world that the strategy known as primary health care (PHC) is the way to achieve the greatest health of the greatest number at the lowest cost and in the shortest time.

Primary health care is a common sense, practical approach to the improvement of human health, emphasizing the importance of nutrition, water, sanitation, health education, and the efficient and equitable allocation of health resources. Its essential simplicity is worth revisiting:

The first line in the defence of health is the individual, the family, and the community. A people well armed with today's knowledge, and a community which is organized to press for and participate in the services it needs, are the principle agents of better health.

For young children, in particular, the most powerful health worker of all is the well-informed and well-supported parent.

The health information which all families and communities have a right to know has now been collected together in a set of ten 'packages of knowledge' under the overall title of *Facts for Life*, published by UNICEF, WHO, and UNESCO in partnership with over one hundred non-governmental organizations (panel 12). In non-medical language, it sets out today's scientific consensus about the timing of births, safe motherhood, breast-feeding, promoting child growth, immunization, diarrhoea, coughs and colds, home hygiene, malaria, and AIDS. It is information which almost all medical experts are agreed on and which almost all parents can act on. Yet it is information which could, if put into practice, reduce child deaths and child malnutrition by as much as half over the next 10 years.

But the larger task remains. How can this health information be communicated in such a way that families are genuinely empowered and encouraged to use it?

The task is clearly too big for the health services alone. And it will be achieved only when it becomes the responsibility of society as a whole: the schools and college systems; the mass media; the religious organizations; the political parties and members of parliaments; the employers and the business communities; the trade unions and co-operatives; the major public service institutions and non-governmental organizations; the women's organizations and community groups; the youth movements; and the artists and entertainers (panel 13).

The mobilization of these existing resources and channels of communication can unlock today's knowledge, making it accessible to all. But success will not come suddenly. The relationship between information and behavioural change is almost always complex, and achieving this first level of primary health care – the demystification of scientific knowledge in order to empower the majority with practical health information – will in itself be a long and difficult road. But it is not primarily finance which bars the way.

Community health workers

The second level of primary health care brings us to the question which has been begged

Guinea worm disease: elimination in the 90s

Prospects for the elimination of guinea worm disease have improved markedly during the last three years. By the end of the 1990s this debilitating disease could be crossed off the ledger of human misery.

World-wide, about 20 million people, mainly in Africa and Asia, are infected by guinea worm disease, and a further 140 million are at risk.

The disease is caused by drinking water contaminated by microscopic water crustaceans known as 'cyclops', which contain the guinea worm larvae within their bodies. The cyclops and the larvae inhabit shallow pools and step-wells where humans step into the same water they drink.

Once in the human body, the female guinea worm grows to resemble a white thread, up to a metre long and containing from one to three million larvae. A year after being swallowed the worm gradually emerges through a painful skin ulcer, usually in the lower limbs. Whenever the ulcer comes into contact with water the larvae are dispersed and taken up by cyclops, which then enter other humans through drinking water.

Besides fever and itching, the symptoms of guinea worm disease include fever, nausea, vomiting, diarrhoea and general body weakness. Some victims die of secondary complications such as tetanus and others are paralysed for life.

Every year, the disease brings months of crippling pain to its victims in rural Africa and Asia. Its economic impact is also considerable. A recent study of a rice-growing area of Nigeria, with 1.6 million inhabitants, estimated that guinea worm disease was causing the loss of 12% of working days and $20 million in rice production every year.

Not only farmers suffer. In Kwara State, Nigeria, women traders affected by the disease were unable to work for two months, resulting in a fall of $70 in their earnings – and this in a region where the average annual income is about $125.

Children also miss school, either because they are too ill to walk or because they have to stay home to help look after crippled relatives.

Yet although guinea worm disease cannot be treated, it can be prevented.

The surest remedy is to provide safe drinking water supplies via pipes, protected wells, or boreholes equipped with handpumps, and to educate communities in hygienic preventive measures. Through these methods, some Nigerian communities have eliminated the disease in only two or three years, and in India the number of reported cases was reduced from 44,800 in 1983 to only 12,000 in 1988. In ten Nigerian primary schools surveyed at the height of the infection season in 1984, guinea worm disease was keeping one third of all pupils out of class. Yet three years later, after wells with handpumps had been installed, the rate of absenteeism had dropped to 2.6%.

Until safe water can be supplied, the alternatives include boiling all drinking water and chemical treatment of the water source during the transmission season, and filtering. In recent years some communities have been taught to filter cyclops from their drinking water, using filter cloths or nylon gauze. In three villages of Burkina Faso, where up to 54% of the people were contracting guinea worm disease, the infection rate plummeted to zero two years after filtering was introduced.

The countries beset by guinea worm infection include some of the poorest in the world, and they will need allies in their fight against the disease. But an end to the suffering it causes is now well within the world's grasp.

throughout this report. Most of the child health actions which could now do so much to protect so many, and for so little, eventually depend, in some significant degree, on the availability of a trained primary health care worker.

It is the health worker with perhaps six months of training, plus supervision and regular retraining, who can respond to three quarters of a community's health care needs, including immunization, oral rehydration, antibiotics, growth monitoring, nutrition knowledge, and advice and help with antenatal care, safe births, breastfeeding, birth spacing, weaning, vitamin A supplements, and the prevention of common illnesses. The duties and qualifications of such health workers will of course vary from country to country, but a more detailed description of the tasks they can be expected to perform is given in panel 14.

In many communities of the developing world today, some kind of health worker is already available: the task is therefore one of training and retraining health personnel to bring them up to date with today's knowledge and to help them to put that knowledge at the disposal of the majority. Depending on the kind of community, a health worker can serve perhaps 200 or 250 families. But how practical is the idea of an up-to-date health worker for every 200 or 250 families in the developing world?

Looking at the benefits before the costs, it is above all the presence of a trained health worker which permits a change of gear, to a much higher level of efficiency, in the relationship between a nation's health resources and a nation's health needs.

The central efficiency is an obvious one. It simply does not need a fully qualified medical doctor, with seven years of expensive training, to prevent or treat the great majority of illnesses in the communities of the developing world.

The cost of training a primary health care worker is perhaps $500. The cost of training a fully qualified doctor is at least $60,000. The trained primary health worker, who is also more likely to remain in the rural areas, therefore makes possible a quantum leap in cost-effectiveness. And it is this increased efficiency which would make it possible to bring about improvements in the health of the majority at an affordable cost before the end of the twentieth century.

In a well-functioning primary health care system, health workers refer more difficult problems to the next level of primary health care – the more highly qualified doctors and medical personnel working in clinics and hospitals. Without that link, primary health care is, at best, a second class health service for the poor. With that link, it is an efficient system for matching the level of care to the level of need*.

Unfortunately, the PHC strategy, although fully inflated with rhetoric in almost all nations, has failed to lift off in all but a few. What ties it down is not doubt over its greater efficiency but a reluctance to accept its greater equity.

The result is that primary health care has usually been treated as a separate, low-cost service for the poor and the less accessible. Operating patchily in peripheral areas, financially starved and politically unimportant, struggling along without adequate training, regular supervision, or meaningful powers of referral, most primary health care workers have become a minor add-on to existing health services rather than a means of reorienting the health resources of a nation, including its doctors and hospitals, to the health needs of the majority[23].

Many governments, for example, have attempted primary health care without incurring additional salary costs on the grounds that health workers should either be volunteers or be fin-

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* There are signs, in the late 1980s, that increasing numbers within the medical profession are beginning to support such a reorientation. At the 1988 Conference of the World Federation for Medical Education, leading physicians from all over the world adopted the *Edinburgh Declaration* which pledged the Federation to a "*sustained programme to alter the character of medical education*". Recommending curriculum changes to reflect the health needs of the majority, the Declaration concluded that "*the aim of medical education is to produce doctors who will promote the health of all people – not merely deliver curative services to those who can afford it or those for whom it is easily available*".[22]

Science for children: research in the 90s

The developing world has 80% of the world's population and over 90% of the world's burden of illness and disability. Yet only 5% of global expenditure on health research is devoted to the health problems of developing countries.

Deploring this mismatch between resources and needs, a group of leading health and development experts is now urging a major reconsideration of health research priorities. In a report to be published early in 1990, the Commission on Health Research for Development – an independent group of practitioners and researchers from 12 countries – calls for greater emphasis on enabling developing countries to carry out research on their own health problems.

Biomedical research has made an important contribution to reducing the toll of death and disease among young children during the past three decades. The eradication of smallpox was made possible by the development of a heat-stable vaccine by freeze-drying and a special bifurcated needle for carrying out vaccinations. The present WHO/UNICEF formula for oral rehydration salts (ORS) is the result of research in Dhaka, Calcutta and elsewhere on the treatment of cholera during the 1950s and 60s.

But the successful application of these and other life-saving scientific breakthroughs has been due to equally important advances in epidemiology, communication, and health planning and management. The success of the WHO smallpox campaign of the 1960s and 70s, for example, was due largely to epidemiological field studies which showed that the most effective strategy was to locate cases and vaccinate every contact rather than attempting to vaccinate whole populations. The successful promotion of childhood immunization and oral rehydration therapy during the 1980s owes much to 'audience research' designed to inform planners and programme managers about the health knowledge, attitudes, and behaviour of parents.

Yet there still exists an enormous backlog of under-utilized health knowledge and technology with the potential to dramatically reduce illness, disability and death among young children in developing countries. Much of this information could be utilized by parents themselves (panel 12).

Science has the responsibility, says the Commission on Health Research for Development, not only to create new health knowledge but also to learn how to apply that knowledge, especially to the major health problems of children, women, and other vulnerable groups.

The key to applying existing child health knowledge and technology, says the Commission, is *essential national research* by developing countries themselves. This type of research includes epidemiological field studies, health communication surveys, and studies of essential drug supplies, health service financing, and management information systems.

Such research provides health planners and managers with essential information about the most common causes of illness, disability and death, and the population groups most affected. It enables planners to establish clear priorities and to design programmes based on the real health needs of the majority, 'thus targeting limited resources to save more lives'.

Because this type of research can improve the cost-effectiveness of health expenditure, the health and economic returns will far outweigh the cost of the initial investment.

But for many of the developing world's greatest health problems, says the Commission, current knowledge and tools are still inadequate. Further *international health research*, both biomedical and social, is urgently needed. Prime examples include respiratory infections, diarrhoeal diseases, tuberculosis, malaria, and AIDS. The potential returns from research in these fields are extremely high.

Such research, which is best carried out through international collaboration and exchange, should involve institutions in both the developing and the industrialized nations of the world.

anced by the communities in which they serve*. Volunteers and community financing may have a role to play, and health workers should, ideally, be local people who are sensitive to, knowledgeable about, and responsible to, their communities. But the fact of the matter is that most health workers, like everyone else, also want jobs, incomes, and if possible a little status. Without these rewards, the drop-out rate among primary health workers has proved to be unacceptably high.

The success or failure of primary health care will depend on whether large numbers of health workers find stable and rewarding jobs in the service of their communities and on whether or not they are respected and supported by the medical profession. Although lower in cost than any other approach, the linchpin of primary health care will not come cheap. A well-trained, well-supervised, and well-supported health worker is the key to achieving universal health care and deserves to be recognized and rewarded as such.

The fact that real primary health care can be put into practice at an affordable cost has recently been demonstrated in the tragic circumstances of the eight-year-long Iran-Iraq war. In both countries, the death rate among young children has been sharply reduced during the 1980s by efficient primary health care systems which have made available all of the advances in knowledge and technique discussed in chapter II of this report through well trained, closely supported, and adequately rewarded health workers.

Perhaps the low-cost nature of primary health care has been stressed too much. Attempts to implement primary health care at too low a cost are now in danger of discrediting an idea which represents mankind's best hope of 'health for all'. As a review this year by the London School of Hygiene and Tropical Medicine concluded:

> *"If adjustments are not made . . . community health worker (CHW) programmes will drift towards demise, drowning in exhortation, not because CHW's themselves cannot deliver but because the support that makes them effective is, in general, absent".*[23]

The message is clear. Primary health care is cost-effective. But it is not cost-free.

Restructuring in health

We are therefore brought back to the question of whether or not an up-to-date health worker for every 200 or 250 families is a practical possibility in the foreseeable future.

To gain some perspective on the question, the ratio of 1 to every 200 families suggests that 1 million health workers would need to be trained to serve the poorest fifth of mankind, the poorest billion people in the developing world. At an average training cost of $500, the total training cost would be $500 million. Such a sum is the equivalent of one fiftieth of one percent of the developing world's GNP, or one percent of the industrialized world's aid budget, or one day's interest on the third world's debt.

Such figures serve to show that whatever other difficulties there may be it is absurd to suggest that it is financially impossible to put a trained health worker within easy reach of every family in need.

But the world is not yet marching in that direction. In the 1990s, the developing nations are set to train tens of thousands of additional doctors, many of whom will be unemployed and few of whom will work in rural areas. Mexico has 4,000 doctors unemployed today, Pakistan has 6,000. In the last five years, Latin America has trained an estimated 200,000 doctors even though, for the same expenditure over the same period of time, it could have trained, say, 150,000 doctors and both trained and paid a decent salary to ***half a million primary health workers***.

Meanwhile, the impact of the debt crisis and adjustment programmes means that existing training schemes are running into trouble. In countries such as Botswana and Jamaica, the training of community health workers has recently been suspended. For different reasons, the country which has done more than any other to pioneer primary health care, the People's Republic of China, has also largely dismantled its barefoot doctor system.

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* WHO and UNICEF are now co-operating with African Ministers of Health to experiment in new ways of financing and managing primary health care services throughout sub-Saharan Africa.

Urban hospitals have largely escaped the cuts. As figure 11 shows, almost three quarters of central government resources available for health in the developing world are still devoted to hospitals providing relatively expensive curative care for a minority of the population. Brazil, for example, devotes almost 80% of its national health budget to hospital care in urban areas, mainly in the south of the country, while rates of illness and infant mortality in the north-east are among the highest in the world.

Reducing the proportion of health expenditures devoted to hospitals from an average of 75% to something in the region of 45% or 50%, even if achieved gradually by postponing new expenditures and allowing primary health care to expand at, say, twice the rate of hospital care, would release significant resources for meeting the basic health care needs of the poor.

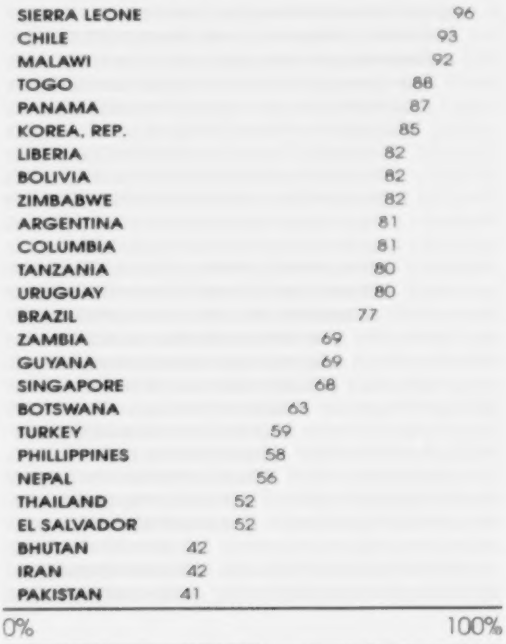
Some countries are trying to move in this direction. Algeria, Bolivia, India, Indonesia, Mexico, Pakistan, and Zimbabwe have all been attempting to restrain expenditures on hospitals while stepping up low cost health services for the majority. Commenting on these efforts, Pakistan's former Minister of Finance and Development Planning writes:

"*When Pakistan confronted the necessity for an immunization programme for our children, what did it take? Immunization coverage for Pakistan's children was 5 percent five years ago; it is 75 percent today. It has been one of the most dramatic stories of increasing child survival, and by now 100,000 infant deaths are prevented every year. And what did it take? More assistance from abroad? Or did it take reducing our growth rates? No. What it took was postponing the decision to build an expensive urban hospital for five years. That, by itself, totally financed the entire expenditure on the immunization campaign*".[24]

Fig. 11 Hospital spending

The majority of illnesses in the developing world could be prevented or treated by primary health workers who are trained and supervised by more qualified personnel to whom they can refer more difficult problems. But primary health care is starved of funds while urban hospitals, usually serving only a small proportion of the public, consume 75%, on average, of central government resources available for health.

Percentage of central government expenditure on health allocated to hospitals, selected countries, 1987 (approximately)



Source: International Monetary Fund, Government Finance Statistics Yearbook 1988.

There is therefore very considerable scope for making more use of both existing and additional resources through a commitment to community health workers, to the principle of primary health care, and to a small shift in priorities towards the poor.

Primary health care holds out the promise of a healthier human and economic future. But it will not be cheap in either financial or political terms. It will require significant national resources. It will require practical support from foreign aid programmes. Above all, it will require courage and commitment by national leaderships and national medical professions.

Education for all

Education for all, the other great goal of social development, poses considerably more difficulties. The obvious difference is that health care may involve a child seeing a health worker for a few minutes on a dozen or so occasions each year, whereas education usually involves contact with teachers and schools for many hours of each day over many years of a child's life.

Yet education for all must somehow be achieved.

Failure is disabling for both the individual and society. Not to be educated, not to acquire at least basic literacy and numeracy, is now a serious disability for any child. And a society's failure to invest in education will disable, in some degree, all other development efforts whether it be the effort to increase agricultural production or the effort to reach people with new knowledge about child care.

The all-round value of the investment is not in doubt. Education is strongly associated with better health and nutrition, higher child survival rates, and lower fertility. In addition, World Bank studies consistently show that economic returns from education are higher than from most other kinds of investment: four years of primary education, for example, is associated with an average increase in farm productivity, all other things being equal, of 10% or more[25].

Like health, education is therefore a cause as well as a consequence of economic development and some observers have ascribed to it the crucial role in explaining the different rates of economic growth achieved by different nations in the same region:

"We have also seen that many societies with similar development potential based on their natural resource endowments have developed very differently due to differences in their human capabilities. This fact largely explains the real problems and differential development paths of African, Asian and Latin American countries today. We have seen neighbors achieving vastly different outputs from similar investments, and growth rates varying from 3 per cent in one country to 7 per cent in another with similar investments. In each case, the critical difference has been made by human skills and enterprise, and by the institutions responsible for producing these".[26]

The education of girls is particularly important. In addition to the improvements it offers to the lives of women themselves, education is strongly associated with higher levels of child health and nutrition and lower levels of fertility and infant mortality. On average, every additional year a mother spends at school is associated with a fall in the infant mortality rate of approximately 9 per 1,000. Only one third of this effect can be accounted for by the fact that more educated women tend to belong to better-off or urban families. Two-thirds of the fall is attributable to the education itself[27].

With such high returns available in the quality of life and the broadening of options, in economic growth and agricultural productivity, in better maternal and child health, and in the slowing of population growth, education for all is an investment which no country can afford *not to make*.

Educational decline

Yet after decades of educational expansion in the developing world, the goal of universal education has receded in the decade of the 1980s (fig. 2). In many nations, expenditure on schools has declined and so have enrolment rates. Few changes could have as much long-term significance, yet few could have attracted so little attention. The Director General of UNESCO, Federico Mayor, has sounded the warning:

"If adjustment policies are to be carried out without regard to the poor and vulnerable, if debt repayment is to take precedence over the necessary investment in the social sectors including education, then the

Facts for Life: the top ten messages

Today's child health knowledge could help to protect the lives and the health of millions of children in the developing world. This knowledge has now been brought together under the title *Facts for Life*. Jointly published by UNICEF, WHO and UNESCO, in association with over 100 non-governmental organizations, *Facts for Life* sets out, in simple language, the information on which medical experts are agreed, on which almost all parents can act, and from which almost all children can benefit. The challenge now is to mobilize all possible communication channels to put this information at the disposal of all. The following are the top ten messages distilled from *Facts for Life*.

○ The health of both women and children can be significantly improved by spacing births at least two years apart, by avoiding pregnancies before the age of 18, and by limiting the total number of pregnancies to four.

○ To reduce the dangers of childbearing, all pregnant women should go to a health worker for pre-natal care, and all births should be assisted by a trained person.

○ For the first few months of a baby's life, breast-milk alone is the best possible food and drink. Infants need other foods, in addition to breast-milk, when they are four to six months old.

○ Children under three have special feeding needs. They need to eat five or six times a day, and their food should be specially enriched by adding mashed vegetables and small amounts of fats or oils.

○ Diarrhoea can kill by draining too much liquid from a child's body. So the liquid lost each time the child passes a watery stool must be replaced by giving the child plenty of the right liquids to drink – breast-milk, diluted gruel, soup, or a special drink called ORS. If the illness is more serious than usual, the child needs help from a health worker – and the special ORS drink. A child with diarrhoea also needs food to make a good recovery.

○ Immunization protects against several diseases which can cause poor growth, disability and death. All immunizations should be completed in the first year of the child's life. Every woman of child-bearing age should be immunized against tetanus.

○ Most coughs and colds will get better on their own. But if a child with a cough is breathing much more rapidly than normal, then the child is seriously ill, and it is essential to go to a health centre quickly. A child with a cough or cold should be helped to eat and to drink plenty of liquids.

○ Many illnesses are caused because germs enter the mouth. This can be prevented by using latrines; by washing hands with soap and water after using the latrine and before handling food; by keeping food and water clean; and by boiling drinking water if it is not from a safe piped supply.

○ Illnesses hold back a child's growth. After an illness, a child needs an extra meal every day for a week to make up the growth lost.

○ Children between the ages of six months and three years should be weighed every month. If there is no gain in weight for two months, something is wrong.

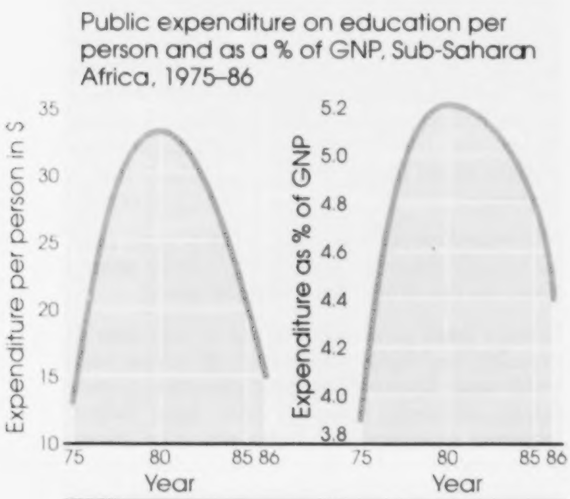
current disequilibria and economic tensions in North-South relationships are likely to turn into a dangerous erosion of human resources that risks undoing the educational progress achieved and might set back the countries of the South by a whole generation or even more.

"*What is so preoccupying is that the greatest damage seems to have been done at the very foundation of the educational pyramid, that is in primary education and in basic literacy for adults and out-of-school youth*".[28]

In more than half of the 100 developing countries recently surveyed by UNESCO, expenditure per primary school pupil is falling in real terms[29]. For those nations, even the percentage of national budgets devoted to education has declined in the 1980s (fig. 12). As a result, the proportion of 6 to 11-year-olds who are enrolled in primary school is also now falling in many countries including Bangladesh, Guyana, Madagascar, and Mexico, and in many African nations south of the Sahara.

Fig. 12 Africa's education downturn

Although figures are only available up to 1986, a downturn in education is already becoming visible in sub-Saharan Africa.


Public expenditure on education per person and as a % of GNP, Sub-Saharan Africa, 1975–86

Source: UNESCO Statistical yearbook 1989

Overall, the problem is not that children do not have schools to go to. Over 90% of the developing world's children still start school. But of the 100 million six-year-olds who will begin their school careers in 1990, over 40 million will drop out before completing primary education. Almost all of those children will be illiterate for the rest of their lives, and they will thereby be unable to fully participate in, or benefit from, the great changes which will surely surround their lives as the twenty first century begins.

Today's drop-out rates are therefore the figures which tell the saddest story of educational decline.

It has been said that there are as many reasons for dropping out of school as there are drop-outs. But the fundamental reason is that the costs of education are rising relative to its perceived value at a time when real incomes are falling in many of the poorest communities. Even where primary education itself is free, the cost of sending a child to school, in clothes, equipment, bus fares, 'donations', and contributions to school fund-raising efforts, can be a large slice of a poor family's income. To these direct costs must be added the opportunity costs of forgoing a child's work in fields or homes.

Education therefore has to be weighed in the balance. And it is then that other factors begin to crowd into the scales: the overworked woman who is desperate for her daughter's help in the home or with the harvest; the father who has never been happy about his daughter going to a mixed-sex school; the perception that even children who spend ten years at school still cannot find jobs; the notion that a daughter doesn't really need school to be a wife and a mother; the thought that a boy's only future is in the fields or the workshop where his father can teach him all he needs to know; the memory of the last school report which showed that the child wasn't paying enough attention; the fact that new shoes will be needed for next term or that the parents' association will soon be coming round for another donation to the school fund.

Weighed in this scale, education itself is increasingly being found wanting as expenditure on schools declines. Capital spending in many nations has almost ceased, and cut-backs in recurring expenditures have meant that teachers' salaries are absorbing a rising percentage of total expenditures. The result is a devastating lack of operating costs. To take one of the worst examples, a recent survey of schools in a rural area of Mozambique found that only 3% of pupils had seats or desks, only 17% of classrooms had a desk for the teacher, only 50% had a blackboard, only 5% of first-years had a language text book and only 13% had a mathematics manual[30].

Against such difficulties, it is not surprising that so many students have to repeat years, or that so many fail to become literate, or that average attainment levels are so much lower than in the industrialized world[31], or that parents decide that the sacrifices they are making are not really worthwhile.

Sadly, more than two thirds of those children who never go to school or who drop out at too early a stage, are female. As the 1990s begin, a girl born in South Asia or in the Middle East has less than a one-in-three chance of completing primary education.

Restructuring in education

Amid continuing economic difficulties, how can this decline be reversed and progress resumed towards education for all? This will be the question facing the *World Conference on Education for All*, sponsored by UNESCO, the United Nations Development Programme, the World Bank and UNICEF, which will be convened in Jomtien, Thailand, in March 1990. It will be the first ever world conference on education and it will bring together educational leaders from over 100 nations to share their experience in an attempt to find a new way forward.

But there are few short cuts. Non-formal education, adult literacy classes, and distance learning schemes, are all important but they are largely for those who have been failed by formal education systems. The minimum goal must be for every boy and girl to have five or six years in primary school, learning to become literate, numerate, and more capable of adapting to and taking more control over the changing circumstances of their future lives. This cannot be achieved without more resources for education, more priority for primary schools within education budgets, and more aid for this specific purpose from the industrialized world. The alternative is the failure to educate 1 billion children in the 1990s and the loss of an opportunity to make what is possibly the most vital of all investments in the twenty first century (fig. 13).

But as with health, the first question is whether the resources currently devoted to education can be more efficiently used.

The most obvious improvement in efficiency in many nations would be to restructure present educational spending in order to tilt the balance towards the primary schools.

Overall, the percentage return to investment is higher for primary education than secondary and higher for secondary than tertiary. Yet the allocation of resources to education shows that secondary and higher education are receiving the lion's share of educational budgets in all regions. As the World Bank has concluded:

> "*there is evidence . . . that in many countries the average dollar invested in primary education returns twice as much as one invested in higher education. Yet governments . . . heavily subsidise higher education at the expense of primary education*".[32]

The comparison with primary health care, and the efficiencies which it suggests, is an obvious one. For just as 100 community health workers can be fielded for the cost of one fully qualified doctor, so 100 children can graduate from primary school for the cost of one graduate from a university.

In many cases, the restructuring process need not be very drastic in order to achieve the desired effect. As the World Bank has also noted:

> "***Even a small percentage decrease in unit costs of secondary and higher education could release additional funds for providing basic education to more people. Moreover, countries that have budgets favouring secondary and higher education disproportionately . . . can with some reallocation finance sizeable increases in enrolment at the elementary level***".[33]

School efficiency

Increasing the efficiency of schools themselves is also a possible 'resource' for the 1990s. But it is not an easy option.

There is an in-built inefficiency in schools where expenditures have been so reduced that 95% of the remaining budget is needed to pay the salaries of teachers whose effectiveness is reduced through lack of books, writing materials, and blackboards.

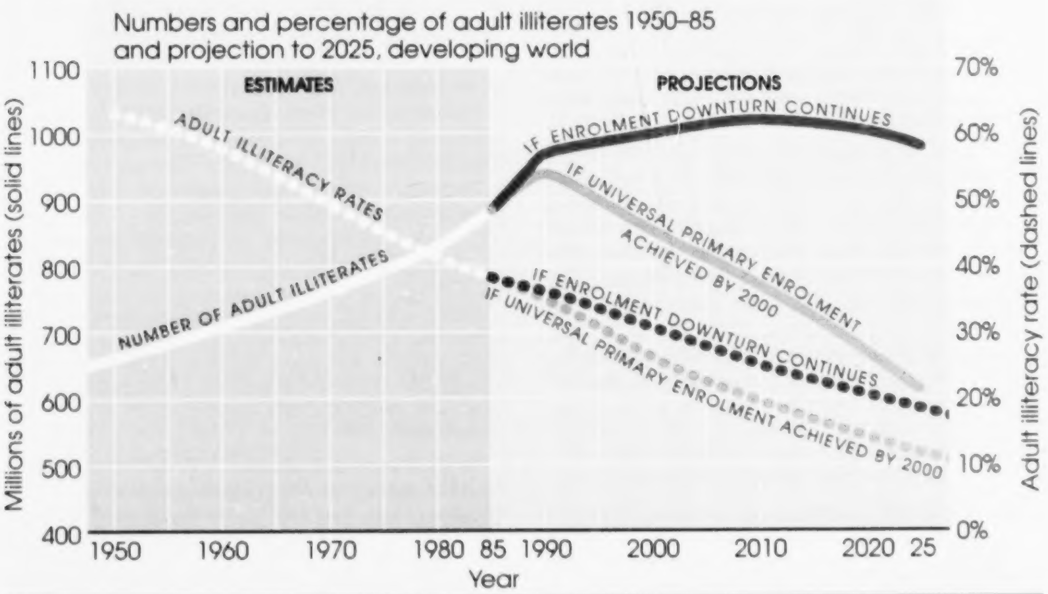
Second, low levels of health and nutrition lead to a waste of resources by preventing children from taking full advantage of the education that is made available.

Third, high repeat rates and drop-out levels of 40% to 50% add up to a major inefficiency because the resources devoted to children who drop out after two or three years are largely wasted.

Many of these issues lie outside the scope of Ministries of Education. Within the school system, the greatest scope for improved efficiency seems to reside in strengthening in-service teacher training, inspection and supervision. In all regions, it is the provision of adequate reading and writing supplies for the schoolchildren themselves which usually has the most significant impact on learning. Efficiency could therefore be improved if governments were to set a minimum

Fig. 13 The literacy challenge

The chart shows the percentage and absolute numbers of adults who are illiterate and projects what will happen in the future a) if the present downturn in school enrolment continues and b) if the target of universal primary school enrolment is reached by the year 2000.



Sources: Population estimates and projections: UN Population Division
Literacy estimates: UNESCO
Literacy projections: based on current enrolment estimates provided by UNESCO and projected according to the two assumptions described above.

All for Health: an information revolution

A good primary school education is essential to every child's preparation for adult life. All children everywhere should have the chance to acquire basic knowledge, learning and 'life skills' through the primary school system.

Yet today, education faces a global crisis. In many developing countries the rapid advance of primary school education and literacy programmes of the 1960s and 70s has become a retreat. The number of children without access to primary education is now over 50 million and still increasing.

Many millions of adults did not acquire through schooling the skills and knowledge needed to improve the quality of their lives – either because they were unable to complete or even attend school, or because their schooling was inappropriate to their real needs.

Perhaps the most important of the 'life skills' is knowledge related to child care. All parents need to know what they can do to protect their children's lives and promote their healthy development. A major new international initiative has now emerged which aims to help spread this knowledge as broadly as possible.

The World Health Organization, UNICEF and UNESCO have joined with over 100 non-governmental agencies in *Facts for Life* – an international health promotion initiative based on a compilation of the most important pieces of knowledge in ten of the most important areas of child care.

This compilation presents, in booklet form, the most up-to-date scientific consensus available on practical, low-cost, family-based ways to improve child health. Published for the Fourth Development Decade (1990–1999), over one million copies have already been printed in a dozen different languages, with a number of countries also about to publish their own editions.

But publication merely sets the stage for the real challenge, which is to mobilize every organized channel of communication – the schools and the mass media, the political and religious networks, the trade unions and employers federations, the health services and professional associations, the voluntary agencies and the community groups.

Many examples of such communication already exist. An accompanying resource booklet, *All for Health*, shows how health promotion is – or should be – 'everybody's business' ... how, for example, religious leaders in Brazil, Colombia, Indonesia, Nepal and Sri Lanka are making vital child health information available to parents ... how television, radio, newspapers and magazines are promoting oral rehydration therapy and immunization in countries such as Algeria, Egypt, the Syrian Arab Republic and Turkey ... how, in Bangladesh, Cameroon and Pakistan, private companies promote child health by printing immunization messages on matchboxes ... how women's organizations in China, India and Kenya help to inform their members about their own health and that of their children ... and how countries such as Colombia and Uganda are using the education system to make today's child health knowledge available to tomorrow's parents.

The *Facts for Life* initiative seeks systematically to encourage the spread of such examples so that every parent and community care-giver receive their information from several sources.

The lessons learned from experiences such as those presented in *All for Health* are also distilled into twelve steps which can help communicators to plan and direct communication activities and programmes.

While *Facts for Life* focuses on the health of women and children, the communication process is just as valid for agriculture and animal husbandry, vocational and income-earning skills, promoting safe water and sanitation, and the protection of the environment.

The most important condition is that information should be something which people can share and act upon. From that starting point, the potential now exists to make people more aware of – and therefore better able to fulfil – their innate capacity to manage the forces which shape their lives. That capacity is the most fundamental of all 'life skills'.

ratio of operational costs to teachers' salaries so that every class had a minimum package of reading and writing materials. At the moment, the proportion of primary school budgets available for items other than salaries is often as low as 1% to 3%[34].

Paying for education

Even if patterns of educational spending were to be changed and efficiency increased, the goal of universal education will continue to recede unless extra resources can be found.

One source of extra funds, much talked about as public spending stagnates or declines under the pressure of debt and adjustment programmes, is the introduction of school fees. In the 1980s, many families have shown themselves willing to pay out of their own pockets for more or better educational opportunities: in India, for example, private expenditures on education already equal public costs[35]. Does it therefore make sense to put existing practice on a rational basis by instituting schemes of parental and community charges in order to release extra resources for education?

If this is to be the way of the future, then certain obvious warnings need to be sounded. First, relying on any significant degree of private finance for primary education in poor countries is almost certainly incompatible with the ideal of education for all. For the poorest 25% to 30% of families, the decision on whether or not to send a child to school is finely balanced, real advantages against real costs, even where education is free. Charging for education would make that decision easier for many parents. As the World Bank report on *Education in Sub-Saharan Africa* has concluded, "***For most African countries the scope for further cost sharing in primary education is negligible or non-existent***".[36]

Direct or indirect charges are already a factor in rising drop-out rates. To cite just one such communication this year, the UNICEF office in Kampala has recently reported that the most common reason for a child dropping out of primary school is the parents' inability to pay school fees. And when financial pressures mount, it is usually the daughter who is forced to drop out of school first. The proportion of girls to boys in the first grade of Kampala's primary schools is close to 50%. But by the seventh grade, not only have half the pupils dropped out of school but the proportion of girls has fallen to 30%.

The policy of increasing resources by charging families for education should therefore be mainly directed towards higher education. Typically, a third of government spending on universities and colleges is devoted to student welfare costs, as opposed to teaching costs, and it is here that charges might be more justified. Certainly the success stories in education (and in economic performance) such as the Republic of Korea and Taiwan suggest that primary schools should be free to all and that private finance should play a significant part only on the higher rungs of the educational ladder[37].

One experiment which does include parental contributions but which may offer hope of an effective low-cost breakthrough is the new school system now being pioneered in Bangladesh by the Bangladesh Rural Advancement Committee (BRAC). With 2,500 schools so far, and a further 2,000 scheduled to open by 1991, the BRAC programme is demonstrating that basic education, including literacy, numeracy and social studies, can be provided for an approximate cost (to BRAC) of $15 per pupil per year by involving parents in putting up simple classrooms and selecting educated members of the community to act as teachers (panel 18). Aimed particularly at the children of the poor and the landless, the programme has been remarkably successful in giving three years of basic education to 8 to 10-year-olds, of whom over half are girls, and graduating 95% of them into the fourth grade of the official primary education system.

Non-formal education

In all its various forms, there is no substitute for primary education, as a minimum, for every child. But in the 1990s there is a new opportunity for education which could touch the lives of all, whether or not they have had or will have the benefit of formal education.

Health workers: what they can do

The titles, duties and training of health workers vary from country to country. The following is a list of what a typical health worker with three months training should be able to do:

○ Advise parents about the importance of:
- immunization of children against infectious diseases
- birth-spacing and the prevention of unwanted pregnancies
- breast-feeding for at least 12 months
- hand-washing and boiling drinking water
- regular check-ups, tetanus vaccinations and iron supplements during pregnancy
- giving children with diarrhoea plenty of fluids or oral rehydration salts
- continuing to feed children during illness (including diarrhoea)
- starting to give babies solid foods at four months and feeding young children with small amounts, several times a day
- recognizing the signs of serious illness and seeking medical help without delay
- giving up harmful traditional practices such as placing cow dung on the stump of the umbilical cord after birth, and certain food taboos during and after pregnancy

○ Help the community to understand the environmental factors behind ill health and disease, and to carry out preventive measures such as:
- protecting water supplies from contamination by humans and domestic animals
- constructing and using latrines to reduce the risks of infection from human faeces
- keeping the environment clean and free of breeding sites for mosquitoes and other disease-carrying pests
- protecting all family members against mosquitoes, especially at night, e.g. by using bed nets, fumigants, and screens on windows and doors

○ Treat common illnesses such as:
- diarrhoea: using 'home solutions' (e.g. rice water, cereal, gruels) or oral rehydration salts to prevent or treat dehydration
- respiratory infections: using the correct dose of an appropriate antimicrobial drug where necessary
- malaria: using the full course of an appropriate anti-malaria drug.

○ Recognize cases of serious illness (e.g. bronchial pneumonia, dysentery, severe diarrhoeal dehydration) and refer patients promptly for treatment at the nearest health facility.

○ Give first aid for injuries.

○ Give vaccinations correctly and at the appropriate times to children and women, or organize vaccination sessions in cooperation with local health services.

○ Organize, together with local health services, regular child growth monitoring sessions where infants and young children are weighed, and where mothers can obtain information about topics such as breast-feeding, weaning foods, birth spacing, maternal health, nutrition during lactation and pregnancy, and the treatment of common childhood illnesses.

○ Provide nutritional supplements, e.g. iron folate for pregnant women, vitamin A for young children and lactating mothers.

○ Identify children whose health is at special risk because of poverty, disablement or the absence of one or both parents, and arrange for special support – either from the community or the government.

○ Help schoolteachers to teach children about the causes of disease and ill health, and what they can do to protect the health of younger brothers and sisters.

○ Assist other health workers – for example malaria control and vaccination teams – to work effectively in the community.

○ Work closely with community and religious leaders, neighbourhood associations and women's groups in promoting child health and development.

There exists today a formidable body of practical knowledge which could enable people and communities to bring about improvements in their own lives. Much of this knowledge concerns the protection or promotion of human health, the child care elements of which have already been outlined in this report. But also available is a backlog of practical knowledge about farming and food production, about maintaining safe water supplies, about fuel-efficient stoves, about protecting the environment, about avoiding AIDS and sexually transmitted diseases, about the dangers of smoking, about how to prevent heart disease, or about the need to stimulate the mental development of young children. Increasingly, also, knowledge needs to be made available about new concepts, about legal and democratic rights, about the rights of women and children, and about the processes of change and adaptation.

In the past, advances in knowledge were often confined to the privileged, or the literate, or the physically accessible. Today, that need no longer be so. Recent decades have revolutionized the capacity of almost all developing countries to communicate with the majority of their peoples and to put new knowledge at their disposal. Radio stations now reach 600 million transistors in the majority of the developing world's homes; television now reaches directly into a majority of the developing world's communities; tens of thousands of newspapers reach out to the 60% of the developing world which is now literate; video parlours and cinemas attract millions of people, even in the poorest communities. Political and religious leaders have learnt to use this new capacity. And it is time that today's communications capacities were also mobilized in the cause of health.

For the kind of person-to-person communication which is often essential, the developing world today has many millions of teachers, assistant nurse-midwives, community health workers, trained birth attendants, agricultural extension workers, and community development officers. It is also more possible than ever before to reach out to people through their own organizations, the village councils, people's health committees, consumer organizations, women's groups, and youth movements, which have been organized in neighbourhoods and villages in almost every developing country. Meanwhile, the growth of professional organizations and employers' associations, of trade unions and co-operatives, of banking and postal services, of electricity and water supply companies, has opened up permanent channels by which hundreds of millions of families could be regularly reached. Ten of thousands of voluntary organizations are also working with the poorest people and communities in almost every country.

The potential therefore exists, for the first time, to mount an information revolution *for the poor*. And the second lane on the road towards education for all is therefore the mobilizing of this vast new communications capacity in order to empower people with the knowledge necessary for health, for continued learning, for making informed decisions, for responding to new opportunities, and for improving the quality of life in their own homes and communities (panel 13).

Development with a human face

By such means, progress towards universal primary health care and universal education can be resumed in the decade ahead – if the commitment is made to a style of development which gives more priority to meeting the needs and investing in the capacities of the poor.

This larger task of moving towards 'development with a human face' would of course require significant additional resources. Assuming that real progress is made in reducing the outflow of debt and interest payments and increasing the inflow of investments, then it can be estimated that an additional $50 billion a year would be required, throughout the 1990s, to move forward towards the great human goals of adequate food, water, health care and education for every man, woman and child on earth. The approximate price-tag for moving convincingly in this direction is therefore less than one half of 1% of the world's gross international product or about 5% of the amount which the world currently spends on the military each year.

Half of this sum might come from the developing countries themselves if, as this chapter has

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Indonesia: 800,000 volunteers

In 57,000 of Indonesia's 68,000 villages, over 800,000 women volunteers, or *kaders*, are working to help parents protect their children's health.

The focal point of their work is a neighbourhood gathering of mothers, under-five children and pregnant women, held each month in private homes and village halls. Known as the 'integrated services post', or *posyandu*, this lively occasion is now the basis for promoting the health of Indonesia's young children.

The *posyandu* has its origins in child weighing posts started by the *Family Welfare Movement* during the 1970s. Its scope now includes:

○ Growth monitoring and nutritional improvement. *Kaders* weigh each child and record the information in a growth chart kept by the mother. They also discuss the child's progress with the mother and explore possible reasons for faltering growth. Malnourished children are referred to the health centre. Vitamin A capsules are distributed regularly.

○ Immunization against childhood diseases: Staff from the local health centre regularly visit the *posyandu* to vaccinate infants and pregnant women.

○ Diarrhoeal disease control. *Kaders* and health centre staff educate mothers about the prevention of diarrhoea through better hygiene, sanitation and safe drinking water, and demonstrate the correct use of oral rehydration therapy (ORT). Sachets of oral rehydration salts (ORS) are also distributed.

○ Mother-and-child health. A midwife from the local health centre conducts antenatal examinations and provides general care and advice on pregnancy. Pregnant women are provided with iron folate pills, and lactating mothers are given special care and advice, e.g. about breast-feeding and weaning.

○ Family planning services. Family planning fieldworkers and *kaders* provide information, advice and supplies to enable families to space births.

The availability of several family health services at the same time and place is obviously a great advantage. In most Indonesian villages it is now possible for a mother to take her child to the neighbourhood *posyandu* to be weighed, immunized, receive vitamin A supplements, and be examined by a nurse or midwife from the local health centre. She can also collect her family planning supplies or have an antenatal examination.

The *posyandu* also serves as an educational centre, where mothers learn about the causes of undernutrition and disease and what parents can do to promote their children's healthy growth.

Since 1986, when President Suharto announced the start of Indonesia's 'Decade for Children', and with the added impetus of the drive for universal childhood immunization, the number of *posyandus* has almost doubled to 217,000. This expansion is all the more remarkable for having been achieved during a period of economic recession, resulting in cutbacks in most areas of government expenditure.

Today, 85% of Indonesia's mothers and children have access to basic health services through the *posyandu* network. Every month, almost 12 million under-five children and their mothers attend a *posyandu* in their own neighbourhood. By the year 1991 access to *posyandus* should be almost 100% nation-wide.

The rapid expansion of *posyandus* has also given a major boost to immunization coverage and the control of diarrhoea. Immunization against measles, for example, rose from only 2% in 1980 to over 50% in 1987, and the diarrhoea case fatality rate fell by 70% between 1980 and 1985.

Some problems still persist. There are still too many mothers who do not understand the growth chart and are not receiving proper advice from *kaders*, who receive only three or four days training and often do not have sufficient knowledge or communication skills. Attendance is also uneven, ranging from 25% in some villages to 90% in others.

To tackle these problems, periodic retraining of *kaders* has now been introduced. In 1987/88, 350,000 *kaders* were retrained, concentrating on villages with low *posyandu* attendance and where many children were not gaining weight regularly.

discussed, priorities were re-examined and the balance tipped more in favour of the poor. The other half, or approximately $25 billion a year, might be expected to come in increased aid from the industrialized nations. To put such a sum into perspective, it would mean increasing today's aid levels by approximately 50% so that, for example, the Western industrialized nations would be giving an average of 0.5% of their GNPs instead of today's 0.35%. The aid target agreed in the 1960s was 0.7%.

Reverting to the more limited objectives set out in chapter II, it is worth repeating that drastic gains for *children*, for their survival, for their health, for their nutritional well-being and normal development, could now be achieved at an additional cost of as little as $2 billion to $3 billion a year.

But it remains the case that these great social goals, on which so many other potential advances ultimately depend, will not be realized in the 1990s without a resolution of the debt crisis and an increase in the overall resources available to the nations of the developing world. How that might be achieved will be the subject of the next chapter of this report.

The role of the rich world

Although more resources for real development could be released through changing the balance of existing expenditures in favour of the poor majority, it is no easy task to engineer a shift in priorities from urban hospitals to rural clinics, from national airlines to domestic bus routes, from prestigious lecture halls to humble primary schools, from meeting the focused expectations of the politically powerful to the diffuse hopes of the poor majority.

In general, the task will be easier where democracy is stronger. But in most countries it will be very much easier and more likely to happen if overall resources are expanding rather than contracting.

For Latin America and Africa, an increase in overall resources in the 1990s is virtually synonymous with the resolution of the debt crisis. Merely rescheduling loans to enable nations to maintain repayments is not a formula with a future. Investment flows must be resumed and the indebted nations must be allowed to grow out of their debts, and that cannot be achieved if debt repayments sluice away all investment in growth.

Further debt reduction by Western governments (particularly for Africa) and further writing down of loans by Western banks (particularly for Latin America) is the only direction which leads anywhere for anyone.

But it is no longer sufficient to speak blithely of a return to higher rates of economic growth, however difficult that might be to achieve, without first asking what kind of growth and for whom.

Many developing countries are now in the throes of economic adjustment programmes which, with or without the International Monetary Fund (IMF), are attempting to restore growth in the new and different circumstances of their indebtedness. The kind of growth which is eventually achieved, if it is to be achieved at all, will be determined by the way in which that adjustment process is designed.

In the last five years, there has been a growing recognition of the principle that both adjustment and growth should be aimed at improving the lives and the capacities of the poor majority. Allowing the poor to bear the main burden of the

Uganda: health in 8,000 schools

Uganda's primary school system is being mobilized to promote the health and development of the nation's children. A new health education syllabus – forming 50% of the science curriculum and 12% of all teaching time – is now being taught in all 8,000 primary schools.

Introduced in May 1988, the syllabus is the first of its kind in East and Central Africa. It springs from the recognition that the education system is the broadest channel for disseminating health knowledge and promoting healthy attitudes and behaviour. Many of the deaths and illnesses occurring in Uganda could be prevented if only families and community leaders were properly informed and supported.

In the past, health education in Uganda has been aimed at adults and carried out by health workers who are not trained as educators and are also too busy giving curative care. Other forms of communication have only limited outreach. Radio, television and the print media, for example, reach only about 10% of the population, mainly in urban areas.

Yet 70% of Uganda's 3 million 6 to 11-year-old children are enrolled in primary school. They have the potential to become 'health messengers', introducing new ideas about health to their families and communities. As the parents of tomorrow, their knowledge and attitudes are also a crucial influence on the health of future generations.

Schoolteachers are also respected and are influential members of their communities. Their example and advice could help to inform families and community leaders about simple, low-cost methods of preventing disease and promoting health.

The new health syllabus covers 19 topics including common diseases, food and nutrition, accidents and first aid, sanitation, family health and social problems. It was tested in 17 primary schools and four teacher training colleges before being introduced on a national basis. Over 5,500 science teachers have also attended orientation workshops on the content and methods of the new syllabus.

Four *School Health Kits* on *Immunization*, *Water and Sanitation*, *Diarrhoeal Diseases* and *AIDS Control* have also been produced and distributed to schools, church groups and other non-governmental organizations. Each kit consists of a set of posters, information sheets, cartoons, flip charts and games.

The syllabus is also accompanied by a 'Teacher's Guide' with attractive illustrations and suggested activities for each grade. Group discussions and role plays are also encouraged on topics such as the spread of disease and the use of latrines.

An emergency *AIDS Awareness Programme* was also developed for secondary school students and later approved for use in the top three primary school classes. AIDS is a highly sensitive topic, and many parents believe that sex education leads to early sexual activity. The emphasis of the emergency programme is on promoting responsible sexual attitudes and behaviour rather than simply encouraging the use of condoms. The programme ended in March 1989, after 550,400 students and 5,500 teachers in 782 schools had been educated about AIDS. The next stage is to develop a *Health Science Syllabus* for secondary schools, including education about AIDS and other sexually transmitted diseases.

Through the primary school system, Uganda's children of today and parents of tomorrow are learning about simple, low-cost means of preventing disease and promoting healthy behaviour. There could be no more effective means of investing in the long-term future of the nation's health.

debt crisis, through a decline in incomes and in their level of health, nutrition, and education, is fundamentally incompatible with this aim. As Edward Jaycox of the World Bank has said:

"*The aim of adjustment programmes is to help restore financial stability and accelerate growth, but the basic objective is always to help alleviate poverty. . . . To be politically sustainable, adjustment programmes must be designed to attenuate any adverse effects on incomes and employment. . . . Adjustment programmes must be buttressed by adequate programmes in education, health, family planning, and natural resource protection*".[35]

The problem is that education, health, birth planning services and natural resource protection all involve government spending, a habit which most adjustment programmes are seeking to discourage. Heavy costs are involved. And there is at present no generally agreed plan on how those costs might be met.

Shifting priorities, and spending, to low-cost basic services, primary health care, primary education, and more carefully targeted food subsidies, can go part of the way. But many countries are limited, politically, in the restructuring they can achieve in the context of shrinking overall revenues. "*African efforts to pursue and deepen the reform process*," says the Secretary General of the Organization of African Unity, "*cannot be sustained indefinitely in the face of an adverse external environment without increased support from the international community.*"

The harshness of the adjustment process, its political dangers, and its environmental consequences, have not entirely escaped the notice of the aid-giving nations and there is considerable sympathy, in many quarters, for the cause of easing the transition to growth and protecting the poorest in the process.

Now is therefore the time for the developing nations to analyse what restructuring in favour of the poor is possible within their own resources and to draw up well thought-through plans for maintaining and expanding primary education, for primary health care systems, for national nutrition programmes, and for environmental protection.

Such plans could form the basis for an increased and newly directed *aid* and investment effort in the decade ahead (fig. 14).

It is unlikely that such proposals would fall on deaf ears. Increased aid, in some measure, would be likely to be forthcoming from an industrialized world which is increasingly coming to accept, for both moral and practical reasons, the necessity of doing something to help restore the momentum of development.

But whatever past or present injustice may be responsible for underdevelopment, the fact of the matter is that significant increases in aid will have to be paid for by the taxpayers of the industrialized nations. There are increasing signs that increases in aid would be supported by the public of the industrialized world *if* it was widely felt that aid was being used for the attack on poverty and the defence of the environment.

Much more needs to be done to mobilize support for increases in aid. But it must also be recognized that one of the limitations is the capacity of developing countries to use that aid for convincing purposes. And that is a restriction which only the developing world can remove.

An aid partnership

Two statements in 1989, one on behalf of the aid-giving nations and one on behalf of an aid-receiving nation, sum up the new role that aid could play in the decade ahead. The first is a statement made by the chairman of the Paris-based Development Assistance Committee, which co-ordinates the aid policies of the Western industrialized (OECD) nations:

"*We detect a vacuum in planning at the sector and sub-sector level. As a result, too much aid is provided in the form of unconnected projects rather than in support of a set of policies and a strategy which has been thought through in recipient line ministries, co-ordinated with planning and finance and approved at the* political level. *As a result, too often requests and responses for aid tend to favour expensive and even unsustainable capital-intensive efforts likely to benefit the higher-income brackets in society and tend to neglect the need for services*

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Zimbabwe: education for all

When Zimbabwe achieved independence in 1980, one of the new government's first pledges was to provide free primary school education for all. At the time fewer than half of all school-age children were enrolled in primary school, and only a third were finishing the full seven-year course.

Within five years, the number of primary schools had almost doubled and every Zimbabwean child of school age was starting school. By 1989, a total of 2.3 million children were attending primary school and 75% were completing the course.

This remarkable achievement is due to the high priority given to education by both the government and the general public. Education now receives 22% of the national budget – more than the Health and Defence budgets combined – the fifth highest percentage in the world.

To construct new classrooms, most schools also have a building fund to which parents contribute either cash or bricks. In rural areas many mothers have set up sewing co-operatives which generate income for the school and help to reduce the cost of school uniforms.

The government pays teachers' salaries, even in church schools. Compared with most developing countries, Zimbabwe's teachers are well paid and also receive sickness benefits and pensions.

To boost the number of trained teachers the government introduced the Zimbabwe Integrated Teacher Education (ZinTec) scheme in 1981. Over 8,000 teachers have been trained through this innovative scheme, which combines supervised classroom teaching with correspondence courses, seminars with field tutors, and short periods of residential training.

The old curriculum, based on a British model, has gradually been replaced by one tailored to Zimbabwe's needs. The emphasis now is on 'Education with Production'. Science, agriculture and technical subjects are taught in ways which integrate theory and practice. At Tafara in Mabvuku district, for example, school pupils dug a fishpond in the shape of a world map. Through this project they learned not only about fish farming, but also about geography, building techniques, food and nutrition, the environment, market economics, bookkeeping, and the control of water-related diseases such as malaria.

Pupils are also encouraged to contribute towards the upkeep of their school and to serve the community. All schools now have fruit and vegetable gardens. Sahumani School in Manicaland, for example, earns $500 a year from the sale of its produce. Plots of eucalyptus trees planted by the school also provide the community with firewood and help to prevent soil erosion.

Zimbabwe's dramatic expansion in primary school education has not been without its growing pains. Facilities are often rudimentary. Teachers have to be extremely resourceful when coping with classes of over 50 children without enough books, notepads or equipment. Maths is often taught using stones, and art using mud and leaves.

Many more trained teachers are still needed. Half the country's primary school teachers have no formal qualifications, and the training of new teachers has been slowed down because the government cannot afford to pay them. Shortages are most acute in rural areas.

But Zimbabwe has demonstrated that, with strong political commitment and the involvement of the community, it is possible for a developing country to make basic education available to the great majority of its children.

reaching out to the whole population. Examples abound. There is the capital city hospital whose maintenance and operations gobble up the budget resources needed in the countryside for a primary health care-oriented programme. Unless objectives and strategies at the sector level have been thought through, we can end up with a set of projects which, taken together, pre-empt the resources needed to meet a country's objectives.[39]

"*. . . what I am suggesting is the need for an objectives-oriented approach where we articulate more clearly what it is that we are trying to achieve. This should help us to sell the programmes to our taxpayers and then be held accountable for making serious progress in the areas we are financing. If we can make this connection between our global agenda and the use of funds, whether it is for enhancing economic activity itself or enhancing the condition of the people of the developing countries, we will have a better chance of selling our taxpayers on the idea of increasing funding for world development*".[40]

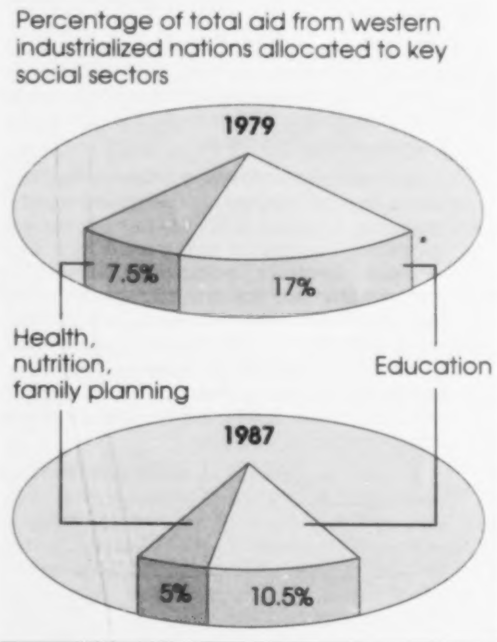
The second statement comes from Pakistan's former Minister of Trade and Development Planning, whose 1989 Paul Hoffman lecture at the United Nations also spoke of drawing up new-style development plans:

"*Plan targets must first be expressed in terms of basic human needs and only subsequently translated into physical targets for production and consumption. This means that there will have to be a clear exposition of the targets for average nutrition levels, education and health levels, housing and transport as a very minimum. There must be an open discussion of what level of basic needs the society can afford at its current per capita income and the projected growth rates. The basic needs targets will then have to be built into detailed planning for production and consumption. In other words, we should proceed from ends to means and not the other way round*".[41]

If such thinking were to become the consensus of the 1990s, then it would be possible to think in terms of compacts between groups of donor nations and individual developing countries for the specific purpose of making measurable progress towards agreed goals which might include universal primary education, low cost water and sanitation services, a halving of child malnutrition, the reduction of measles and neonatal tetanus, and a number of other major advances which are now feasible (panel 21).

Fig. 14 Aid for health and education

The chart below shows that aid for nutrition, health, and education is a small and diminishing part of the total aid effort.



Source: Development Co-operation Reports, OECD, Paris.

In many countries, significantly increased aid for such programmes would be needed to make them politically feasible. And enhancing the political feasibility of long-term action in favour of the poor, and of the environment, is the most important role which aid can play in the 1990s.

Faced with so many short-term problems and pressures, in addition to the exigencies of political and economic survival, many governments find it very difficult, even if the will is there, to increase resources for long-term goals of which the poor, the future, and the environment are the main

Education: breakthrough in Bangladesh

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The one-teacher schools of the Bangladesh Rural Advancement Committee (BRAC) are demonstrating a new model of basic primary education, accessible to the children of the poor majority and relevant to their needs.

As in many other developing nations, the formal primary education system in Bangladesh is not yet adequate. Some 30-35% of children do not even start school, and by the third grade 60% of those who start have already dropped out. School costs, inaccessibility, and lack of encouragement generally exclude the children of the poor. In government schools, classes are often huge (70 per teacher in the first year), teachers are often poorly motivated and badly supervised, much of the curriculum is unrelated to the children's lives, and there is an acute shortage of textbooks.

In 1985, in response to demands from village parents, BRAC started 22 experimental village schools aiming to provide basic literacy, numeracy and social awareness to the children of landless families. By late 1989 the programme had expanded to 2,500 village schools, with another 2,000 to open by 1991.

The BRAC schools enroll 8 to 10-year-olds in a three-year programme of Bangla (the national language), arithmetic, and social studies.

Classes are held in a building made of woven bamboo or mud, with a thatched or tin roof. Children sit on mats spread over the earth floor. Each child receives a slate, pencils, notebooks, textbooks and a lap board. Teachers are provided with a blackboard, a stool, and a trunk in which materials are kept.

The children are all from the poorest landless families. Particular emphasis is placed on enrolling girls: 63% of pupils are girls; the target figure is 70%.

The BRAC schools have succeeded beyond expectations. The daily attendance rate is over 95% and the drop-out rate only 1.5% over three years. A remarkable 95% of pupils have passed examinations for entry into the fourth class of the official primary education system. To the surprise of all observers, most of these children have also made the transition to government schools.

The pupil-to-teacher ratio at BRAC schools is kept strictly at 30 to one so that children can participate actively in learning activities. Teachers follow a highly structured curriculum, using learning materials and teaching notes developed by BRAC through several years of experimentation.

Teachers are not fully trained professionals, but better-educated, younger, married villagers who take part in an intensive, 12-day training course and receive regular guidance, supervision and refresher training. They are paid a small monthly stipend for teaching up to three hours a day, six days a week. About 75% of teachers are women. In government schools, by contrast, only 14% of teachers are women.

Parents and village leaders are actively involved in establishing and running BRAC schools. Before a school is opened, the villagers must provide a classroom (for which BRAC pays a small rent), and decide on school hours. Parents' meetings are held monthly and are well attended.

The curriculum of the BRAC schools is more functionally oriented than that of government schools. Arithmetic, for example, includes simple accounting, measurements, and the handling of money. Social studies focuses on practical topics such as health and cooperation among neighbours, and problems such as early marriage and dowry difficulties.

The cost to BRAC of establishing and running the schools is about $15 per pupil annually. The organization receives funds for the programme from several donor agencies.

In 1988, BRAC experimented with a second type of school, for 11 to 14 year-olds who have never received formal education. 225 such schools have now been opened. The curriculum has been adapted from that used in the schools for 8 to 10-year-olds, but is covered in two years.

Plans are now being made to rapidly scale up the numbers of both types of schools.

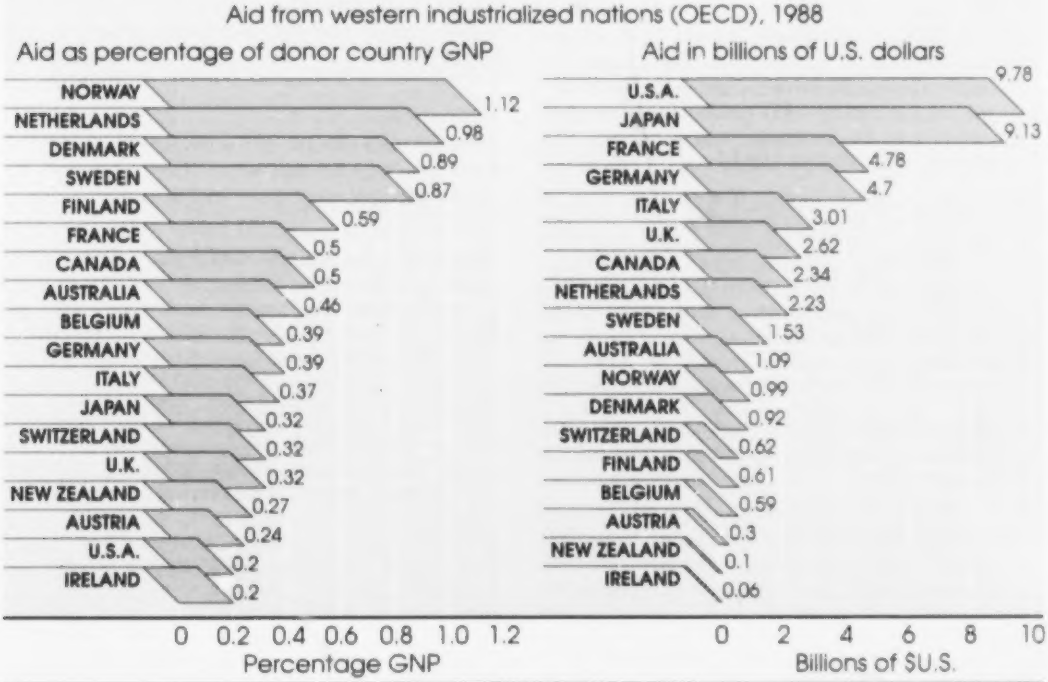
beneficiaries. In the 1990s, enlarged aid programmes should be designed to reduce the political will required for, or to enhance the political attractiveness of, those measures which offer little immediate political or economic advantage but which are essential for the long-term improvement of human lives and capacities.

For 20 years, aid has remained at approximately one third of 1% of the industrialized world's GNP. It is pitifully small (fig. 15). The financial resources available to the developing world must be increased – through debt reduction, trade reform, and improvements in both the quantity and quality of aid – if progress is to be made. But these resources need to be enlarged as part of a long-term and consciously planned effort to protect the poor from the immediate effects of adjustment programmes and to invest in the most reliable of all engines for future growth – a healthy, well-nourished and well-educated people.

Finally, if the world is to move towards development for the poor in the decade ahead, then the World Bank and the IMF will need to lean their weight in the same direction. At the moment, Bank and IMF loans are conditional on the fulfilment of economic criteria such as reducing public spending and stabilizing the balance of payments. But it is now essential to take a wider

Fig. 15 The aid league

Official development assistance (ODA) from the OECD countries totalled $47.6 billion in 1988, an increase of 6.7% in real terms over 1987. The ODA as a percentage of the combined GNP's of the OECD countries also rose from 0.34% in 1987 to 0.35% in 1988. This is still only half the UN target of 0.7% established in the 1960's. Nonetheless, it may be that the long decline in the level of aid is now coming to an end.



Source: Development Assistance Committee, draft Chairman's Report for 1989, OECD, Paris, August, 1989.

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AIDS: the threat to children

AIDS is now a major threat to the health and survival of children and women in many countries, and its impact is expected to grow during the 1990s.

According to the World Health Organization (WHO), which is coordinating global efforts to control and prevent AIDS, at least 1.5 million women worldwide are infected with human immunodeficiency virus (HIV) – the virus which causes AIDS. Babies born to women infected with HIV have a 25%–40% chance of being infected before or during birth. These children are almost certain to die before the age of five.

In the United States, for example, almost 2,000 children have been diagnosed as having HIV/AIDS, and it is estimated that a further 10,000 to 20,000 will be infected by 1991. AIDS is also a serious concern in the Caribbean, and recent trends in parts of Latin America and Asia are disturbing.

But it is in sub-Saharan Africa that AIDS poses the greatest threat to the health of children and women. In one East African country, 14% of all reported AIDS cases are children under four years of age. The World Health Organization estimates that at least one million African women are infected with HIV, and surveys in urban areas of several African countries have shown up to 25% of women to be infected. Many thousands of babies will be born with HIV infection during the 1990s, and in some African countries the child survival gains achieved during the past three decades may soon be reversed.

In Africa, AIDS has deep and far-reaching consequences for all members of the family. The diagnosis of HIV/AIDS in a young child is usually the first indication that the mother – and probably the father as well – is also infected. Before long, both parents are likely to become chronically ill and to die of AIDS-related causes. The problem of how to provide adequate care for the surviving children, the so-called 'AIDS orphans', urgently needs to be solved.

Equally urgent is the need to provide people with HIV/AIDS with basic medical care, counselling and social support within their own homes, since hospitals are already over-stretched and unable to provide adequate care and treatment for the rapidly escalating numbers of HIV/AIDS patients.

There is little prospect of a cure for HIV/AIDS, or an effective vaccine, before the end of the 1990s. But the rapidly growing numbers of AIDS deaths among young children are not inevitable. The key to protecting children from AIDS is the mobilization of health providers and social workers, community and religious leaders, the mass media and the schools, professional associations and non-governmental organizations of many kinds to inform people how they can take responsibility to prevent the spread of HIV infection within their families and communities.

Social mobilization of this kind is now beginning to happen in a number of countries. In Tanzania, journalists have been trained to communicate accurate information about HIV/AIDS through the mass media. In Kenya, non-governmental organizations have organized training courses in AIDS awareness for women's leaders, health workers and church leaders. In Uganda (panel 16), Rwanda, and Burundi, school health education courses have been revised to include AIDS awareness and prevention.

There is hope for a future without the threat of AIDS. The health and survival of children can be dramatically improved, and the spread of AIDS greatly reduced, if all families are empowered with essential child health knowledge, including information about the control and prevention of AIDS.

view of these conditions. In co-operation with other donors and other international agencies, as well as the governments of the countries concerned, economic adjustment programmes also need to take into account the *social impact* of those conditions in order to ensure that nutritional standards are not undermined, that the incidence of low birth weight and childhood disability does not increase, that immunization rates do not fall, that adjustment will not lead to the closure of clinics and primary schools. The days are gone when financial institutions could confine their concerns to the purely economic. The meeting of agreed social goals is also essential to prevent both immediate human deprivation and the disinvestment in *people* which undermines long-term growth.

The gains for the industrialized world

Opening up the debt trap, renewing investment, liberalizing trade, compensating for steep falls in commodity prices, and increasing the level of aid, are the conditions for reversing the disastrous trends of the 1980s and allowing a renewal of progress towards the great material goals of adequate food, health care, and education for all.

Within a short time, such measures would also begin to restore health to the world economy and bring tangible benefits to the industrialized countries themselves. In particular, the United States stands to gain from an end to the debt crisis. Faced with its own enormous trade deficit, the United States needs customers. At the moment, many of those potential customers are spending 30% to 50% of their foreign exchange earnings on servicing debts rather than importing goods. It is therefore American and European manufacturers, rather than American and European bankers, who are suffering the consequences of the developing world's indebtedness. Conversely, a resolution of the debt crisis could reduce the US trade deficit by up to $30 billion a year[42]. In total, the debt crisis and the consequent cut backs in imports by the developing nations are estimated to have cost Europe, North America, and Australasia approximately 6 million jobs during the 1980s[43].

The economies of both developing and industrialized nations would also feel the benefit of increased aid programmes specifically designed to meet *social targets* such as universal primary education, primary health care, water and sanitation services, and improved nutritional levels. Most of the expenditures required to move towards such goals would be expenditure in *local currencies*: foreign aid which helped to finance these investments would therefore increase the foreign exchange 'earnings' of the recipient nations, thereby facilitating the opening-up of economies and an increase in trade.

Poverty and the environment

In addition to these economic benefits, an end to the debt crisis and a renewed commitment to progress for the poor is also in the interests of the entire world community in its dependence on a common ecosystem.

As the world enters a crucial decade for the environment, many governments in the developing world are finding themselves caught between the conflicting demands of preserving the environment and paying their debts. According to a special report on 'Environment and sustainable development' prepared by UNICEF in 1989:

"*Many countries, especially in Africa and Latin America, have little possibility of pursuing the 'sustainable economic policies' recommended by the Bruntland Commission when they are forced to deplete their forests, soil, water, and other natural resources in order to pay their external debt, provide for essential imports and meet their unavoidable budgetary obligations*".

Environmental degradation needs no passport, recognizes no frontier, respects no nation's immunity. What happens to the environment in the developing world is therefore everyone's problem. And the greatest threat is not progress but poverty.

Poverty and the lack of alternatives are the forces which drive rural people to the burning of forests, the tilling of marginal lands, the overdependence on finding grazing for cattle, the overcutting of trees for fuel. Poverty and lack of

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Debt relief: for child survival

UNICEF's work on 'adjustment with a human face' has documented the tragic human consequences of the economic crisis and the massive debt burden of many developing countries during the 1980s. Children, women and other vulnerable groups in most countries of Africa and Latin America, and in several Asian countries, have borne the brunt of the suffering.

Heavily indebted governments have cut expenditure on social services, undermining the health and education of children. The pressure to meet massive debt service obligations, coupled with an emphasis on short-term macro-economics, has also diverted many debtor governments away from the goal of investing in human development.

In addition, cuts in other areas of government spending and the need to earn foreign exchange by boosting exports often cause serious – perhaps irreversible – damage to the environment, further compromising the prospects for sustainable development.

The consequences of these policies will seriously affect the health, lives and well-being of future generations.

Increased international awareness of the magnitude and consequences of the debt crisis has led to many proposals for debt reduction and economic restructuring. There have also been other proposals – less well-known but potentially important – which seek to exchange the debts owed by developing countries for schemes to protect the environment, preserve cultural heritages, and promote the survival and development of children.

It may seem paradoxical to suggest that the problem of debt can be converted into an opportunity for promoting human development. In fact, this type of conversion is already a realistic proposition.

The key lies in the so-called 'secondary market' for trading commercial bank debts. Faced with the prospect of debts not being repaid at all in the foreseeable future, banks are now prepared to 'sell off' their Third World loans (sometimes to the debtor governments themselves) at discounts ranging from 5% up to 98%. In effect, banks are willing to exchange a dollar of debt which has, say, a 25% chance of being serviced and repaid at some future time for 25 cents cash today.

Where discounts are extremely large, a number of banks have been prepared to forgo any payment, provided that the funds are channelled instead into a worthwhile human development or environmental programme, under the auspices of a reputable international agency.

UNICEF is currently involved in three schemes in which European banks have written off debts owed by Sudan, enabling the Sudanese government to release local currency for UNICEF-supported health, reforestation and drinking water projects.

The Social Investment Fund recently launched by the InterAmerican Development Bank (IDB) and UNICEF is another promising initiative. Financed initially by interested donors, the Fund will make loans to governments in Latin America and the Caribbean, enabling them to buy back their external debts in the secondary market at substantial discounts. These loans will be at reduced interest rates and carry extended grace and amortization periods. The borrower governments will be required, in addition, to contribute funds in local currency to social development programmes agreed between the government, the IDB and UNICEF.

This scheme offers debtor governments the opportunity to reduce their external debts, and at the same time invest in human development.

Through innovative measures like these, the international financial community can make a modest but meaningful contribution to the well-being of the children of the developing world, who deserve better than to inherit a mountain of debt incurred by their elders.

confidence in the future are also engines of rapid population growth.

It is therefore development and rising prosperity which can do most to protect that environment. Smallholders who have security of tenure, who are literate, who have access to credit and scientific advice, who have markets for their crops and roads to get them there, who have small farm machines and a degree of security instead of large families, are the best safeguards for sustainable development.

The poor of the developing world are far removed from the ecological concerns of the rich. For them, environment and development are not separate issues, let alone opposing concepts. Environmental planning in poor areas must be based on more production not less, more use of resources not less, and if it is to depend on the co-operation of the poor then it must also offer families improvements in their lives today and a clear stake in a better life tomorrow. The increase in concern for the global environment and for sustainable development is one of the most hopeful signs for the decade ahead. But it will be a less practical force for good in the world if it does not take into account the right and the need of large numbers of the poor to produce and consume *more*.

Market forces

Finally, in this review of the main practical opportunities for social development in the difficult economic decade ahead, we come to the question of what advantage can be taken of the prevailing winds of free enterprise now blowing across both developing and industrialized worlds.

As well as being the decade in which development was halted for much of mankind, the 1980s will perhaps also be remembered as the decade in which economic theories began to change with remarkable suddenness. Enterprise systems and market mechanisms are now being more fervently embraced by almost every nation, including many with long marriages to other ideologies. But in the process, lessons are being learned. And if the 1990s are to see movement towards the kind of civilization which allows all people to meet their minimum human needs, in both industrialized and developing worlds, then one of the most important tasks of the decade will be to get the relationship right between the responsibilities of government and the mechanisms of the marketplace.

Few would now deny that decentralized decision-making based on market mechanisms has a key role to play if a nation's full weight of skills and resources is to be brought to bear on the doors to growth.

Agriculture-led growth to provide employment and rising incomes for the rural poor, for example, is unlikely to happen without a reasonably free-functioning market system. Success depends on the energies and enterprise of thousands of small farmers making tens of thousands of individual decisions over the investment of their labour, their land, their capital, and the balance of risks and rewards in the context of their local knowledge and their own family circumstances. It is therefore an essentially decentralized process, and one which has proved far too complex, dynamic and local-specific to be successfully managed by governments. The genuinely spectacular growth in agricultural productivity in China during the 1980s is evidence, on the largest possible scale, of the energies and the productivity which can be released by trusting people to make their own decisions and allowing them to benefit from their own labours. The more recent quadrupling of maize production in Zimbabwe shows that such achievements are also possible in the different and difficult circumstances of sub-Saharan Africa.

But as continental shifts towards free market systems gather momentum, the experience of the 1980s also stands as a warning against allowing any economic ideology to obscure the human face of progress.

Mention has already been made of the rising poverty which has accompanied a decade of economic growth in several industrialized nations. That fact, plus persistent social problems such as tobacco, alcohol and drug abuse, show that the market system cannot solve all problems. And without a strong framework of development

Human development: goals for the 90s

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As the international community formulates development goals and strategies for the 1990s, there is a growing consensus that human development must now take centre stage.

In the past, development planners have been preoccupied with economic indicators such as GNP, savings, investment, trade, and production targets. Economic growth alone, however, is no guarantee that basic human needs will be met.

Human development, on the other hand, focuses on the fulfilment of basic human needs as the most important indicator of development.

The starting point of any such strategy must be children. A wise investment in children's health, nutrition and education is the foundation stone for all national development. Neglecting children's needs will, by contrast, condemn them and their society to a vicious circle of poverty and deprivation.

It is with this conviction that UNICEF and its partners have proposed the following major goals for child survival, development and protection during the 1990s:

○ Between 1980 and the year 2000, a reduction of infant and under-five mortality rates in all countries by 50%, or to 50 and 70 per 1000 respectively, whichever is less.

○ Between 1980 and the year 2000, a reduction of the maternal mortality rate by 50%.

○ The virtual elimination (less than 1%) of severe malnutrition and a 50% reduction in moderate malnutrition.

○ Universal access to safe drinking water and sanitary means of excreta disposal.

○ Universal basic (primary) education for children and accelerated adult literacy programmes, especially for women.

○ Improved protection of children in especially difficult circumstances.

UNICEF – together with WHO, UNESCO and other agencies – has also identified a number of supporting goals which, besides being important in their own right, would contribute immensely to achieving the major goals listed above. These include, for example:

○ Global eradication of polio by the year 2000.

○ Elimination of neonatal tetanus by 1995.

○ Elimination of guinea worm disease.

○ Virtual elimination of Vitamin A and iodine deficiency disorders.

○ Access by all couples, especially women, to information and services for child spacing.

○ Growth promotion and its regular monitoring in all countries by the end of the 1990s.

○ Reduction by 95% in measles deaths and reduction by 90% in measles cases in 1995, compared with pre-immunization levels.

○ Reduction by 70% in deaths due to diarrhoea in children under five years of age.

○ Reduction by 25% in deaths due to acute respiratory infections in children under five years.

These and other human goals are not just desirable, but technically feasible and financially affordable. The major requirement for their achievement is political will, vision and leadership. It is UNICEF's hope that the leaders of the world and the development community will rise to the challenge of these goals, aimed at overcoming the worst manifestations of poverty through the enhancement of human capabilities.

The achievement of these goals would go a long way towards realising the provisions of the recently adopted United Nations Convention on the Rights of the Child (panel 2), whose ratification and implementation by all countries is also one of the goals proposed by UNICEF for the 1990s.

policy and clear social aims, democratically drawn up and entrusted to governments to pursue, the market will fail the majority of those most in need.

Many of the most basic human needs discussed in this report, for example, are unlikely to be met by the undirected play of market forces. The unrestricted law of the market-place is already failing those families, throughout the poor world, who are spending $500 million each year on ineffective anti-diarrhoeal drugs in response to child illnesses which could be prevented and treated by low-cost methods out of which there is very little profit to be made. The unrestricted law of the market-place is failing those millions of mothers who are being persuaded to risk their children's lives and health by changing from low-cost breast milk to high-cost artificial substitutes in the induced belief that bottle feeding is more modern or more fashionable. And the unrestricted law of the market-place is also failing those families who are spending 5% to 10% of their incomes on water in slums and shanties when clean, safe water could be provided from public stand-pipes at a fraction of the cost.

In a positive sense, also, the role of government remains critical. Especially in poor countries where investments in basic infrastructure cannot be made by private enterprise alone (as in the early development of today's industrial nations), government can help to mobilize the investment necessary to liberate the energies of enterprise. The already-mentioned gains in food production in Zimbabwe, for example, have been achieved by the efforts of thousands of small farmers and particularly by the efforts of rural women. But those efforts have been liberated by government action in redistributing land to smallholders; in mobilizing national scientific capacities; in financing research and development into seeds, fertilizers, and pesticides relevant to the small farmers' needs; in paying for the training and salaries of extension workers to act as links between scientists and farmers; in making credit available to the poor by accepting eventual crops as collateral; in legalizing agricultural trade unions; in investing in roads to get surplus crops to market. Similarly the successes of rural development in Japan, the Republic of Korea, and Taiwan during the 1950s and the 1960s were based not only on free market systems and incentives but also on government policies which redistributed land (stipulating a three-hectare maximum holding) and promoted farmers' associations.

In the success stories of economic development, from the established industrial powers of Europe and North America to the rapidly industrializing nations of South-East Asia, governments have sought to set the parameters for development and to discipline the energy of enterprise to the benefit of society as a whole. Even in the dynamic free enterprise success stories of East Asia, it is government which has invested in modern infrastructure, introduced land reform, provided stability, ensured that the bureaucracy actively helps exporters, acted against corruption, and controlled the flow of foreign exchange. Proportionately, government plays as big a part in the economic life of the Republic of Korea as it does in India[44].

In the task of ensuring that people are able to meet their basic needs – including their needs for a minimum standard of nutrition, education and health care – the role of government has always been essential. As economist Amartya Sen has written:

"*Even in the history of a country such as Britain it is the delivery system of food and health care – over and above the increases in economic opulence – that has played a strategic role in crucial periods of expansion in the elementary freedom to live long and live well*".[45]

Government and children

It is the particular responsibility of government, in both industrialized and developing worlds, to set the parameters for a new deal for children in the 1990s.

In the lessening of regional and ideological conflicts, in the beginning of progress towards disarmament, and in the birth of a new global awareness of environmental issues, it is possible that, as Soviet Foreign Minister Eduard Shevardnadze has put it, "*A new political intellect is prevailing over the dark legacy of the past*".

If the twenty first century is to be a better one for mankind than the twentieth has been, then it is essential that the principle of first call for children become a part of that new political intellect.

It is within our power to end child deaths, child abuse, child illness, and child malnutrition on the scale which defaces our civilization today. And it is within our power to ensure that every child has a school to go to, a health worker to refer to, and a diet which allows normal mental and physical growth.

But as the 1990s begin, it is important to begin the journey towards those great goals by taking the most obvious first steps. Several of the greatest health advances in human history now fall within the range of the practical and the affordable. For the health and well-being of women and children, in particular, dramatic progress is possible even in the early years of the 1990s. Diarrhoeal disease, still the single biggest cause of illness, malnutrition and death among the world's children, can be brought under control. Vaccine-preventable disease, and especially the tetanus and measles which together kill over 2 million children each year, can be reduced to a small fraction of its present proportions. Poliomyelitis, which now cripples a quarter of a million young lives each year, can be eradicated. Child malnutrition, which now saps the growth of 150 million under-fives, can be reduced by at least 50%. And the ill health of so many millions of women can be drastically improved by according them the right and the knowledge and the means to choose how many children they will have and when.

All of these advances, meaning so much to so many of those whose voices are usually unheard in the great debates over the selection of society's goals and the allocation of its resources, are clearly within technical and financial reach in the decade which lies ahead. Reaching those goals is no longer a question of physical or financial possibility. It is a question of political priority.

In the developing world, from the traumatic events of the 1980s must be born a new commitment to styles of development which give priority to meeting the minimum needs and enhancing the productive skills of the poor majority during the 1990s.

In the industrialized world, a new commitment to the international development effort is also demanded of political leaders, press, and public. Debts must be reduced and aid and investment must flow more freely. Significant progress is simply not possible without an increase in the resources available to the developing world.

Public opinion will be the fundamental factor in bringing such change about. And tragic and moving as pictures of starving children may be, the time has come to ask why the world reacts with outrage and demands action when a quarter of a million children are threatened by famine but remains unperturbed by the annual deaths of some 5 million young children from illnesses as simple and cheaply prevented as measles and dehydration.

Amid so many other pressing concerns, it is difficult to find time on the world's agenda for problems which, it may be argued, have always been with us and cannot therefore be regarded as exceptional or urgent. But for the children who will unnecessarily fall to malnutrition, disease, disability, and an early death in the decade ahead, and for the families of those children, such an argument will carry very little weight.

From the broader perspective of our common future, ensuring the healthy physical and mental development of children is the most important investment that can be made in the healthy social and economic development of our societies. Doing what can now be done to achieve that goal is therefore an issue worthy of its place on the agenda of the world's political leaders, the world's press, and the world's public, as we enter the last decade of the twentieth century.

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II
STATISTICS

Economic and social statistics on the nations of the world, with particular reference to children's well-being.

General note on data Signs and explanations

INDEX TO COUNTRIES

TABLES

1: Basic indicators

U5MR ☐ IMR ☐ population ☐ births and infant and child deaths ☐ GNP per capita ☐ life expectancy ☐ adult literacy ☐ school enrolment ☐ income distribution

2: Nutrition

Low birth-weight ☐ breast-feeding ☐ malnutrition ☐ food production ☐ calorie intake ☐ food spending

3: Health

Access to water ☐ access to health services ☐ immunization of children and pregnant women ☐ ORS use

4: Education

Male and female literacy ☐ radio and television sets ☐ primary school enrolment and completion ☐ secondary school enrolment

5: Demographic indicators

Child population ☐ population growth rate ☐ crude death rate crude birth rate ☐ life expectancy ☐ fertility rate ☐ urbanization

6: Economic indicators

GNP per capita and annual growth rates ☐ inflation ☐ poverty ☐ government expenditure ☐ aid ☐ debts

7: Women

Life expectancy ☐ literacy ☐ enrolment in school ☐ contraceptive use ☐ tetanus immunization ☐ trained attendance at births ☐ maternal mortality

8: Basic indicators on less populous countries

9: The rate of progress

U5MR reduction rates ☐ GNP per capita growth rates ☐ fertility reduction rates

Footnotes to tables 1–9 Definitions Main sources

General note on the data

The data provided in these tables are accompanied by definitions, sources, explanations of signs and individual footnotes where the definition of the datum is different from the general definition being used. Tables derived from so many sources – nine major sources are listed in the explanatory material – will inevitably cover a wide range of data reliability. Official government data received by the responsible United Nations agency have been used whenever possible. In the many cases where there are no reliable official figures, estimates made by the responsible United Nations agency have been used. Where such internationally standardized estimates do not exist, the tables draw on data received from the appropriate UNICEF field office. Except for the indicator on access to health services and the indicators on immunization coverage, where UNICEF is identified as a main source, all data from UNICEF field office sources are marked with an * or a y.

The data for under five and infant mortality rates, life expectancy, crude birth and death rates, etc. are part of the regular work on estimates and projections undertaken by the United Nations Population Division. These and other internationally produced estimates are revised periodically, which explains why some of the data will differ from those found in earlier UNICEF publications. In the case of GNP per capita and ODA, the data are the result of a continuous process of revising and updating by the World Bank and OECD respectively.

Where possible only comprehensive or representative national data have been used. Where the data refer to only a part of the country this is indicated in a footnote.

Signs and explanations

Unless otherwise stated, the summary measures for the four U5MR (under five mortality rate) groups of countries are the median values for each group. The median is the middle value of a data set arranged in order of magnitude. The median is the average commonly used where there are a large number of items of data with a great range, as is the case in these tables, and it has the advantage of not being distorted by the very small or the very large countries. In cases where the range is not so extensive, the most commonly used average is the mean, which is the sum of all the items divided by the number of items. However, because we are dealing here with countries of very different sizes of population, we would immediately encounter the problem of weighting if we used the mean. Hence the choice of median to give the reader some idea of the situation in a typical country of the appropriate U5MR group.

	Data not available
*	UNICEF field office source
( )	Less than half the unit shown
T	Total (as opposed to a median)
x	See footnote at the end of the tables
y	UNICEF field office source, see footnote at the end of the tables

Most of the U5MR and IMR figures are interpolations based on five-year estimates prepared by the UN Population Division on an internationally comparable basis using various sources. In some cases, these interpolated estimates may differ from the latest national figures. In general, data released during approximately the last 18 months are not incorporated in these estimates.

Index to countries

In the following tables, countries are ranked in descending order of their estimated 1988 under five mortality rate which has then been rounded to the nearest whole number. The reference numbers indicating that rank are given in the alphabetical list of countries below.

Afghanistan	1
Albania	87
Algeria	54
Angola	4
Argentina	85
Australia	119
Austria	122
Bangladesh	22
Belgium	111
Benin	23
Bhutan	19
Bolivia	29
Botswana	62
Brazil	66
Bulgaria	102
Burkina Faso	9
Burundi	21
Cameroon	36
Canada	127
Central African Rep	12
Chad	11
Chile	97
China	84
Colombia	74
Congo	50
Costa Rica	101
Côte d'Ivoire	40
Cuba	105
Czechoslovakia	108
Denmark	116
Dominican Rep	70
Ecuador	65
Egypt	45
El Salvador	67
Ethiopia	7
Finland	131
France	124
Gabon	32
German Dem. Rep	112
Germany,Fed Rep. of	120
Ghana	39
Greece	106
Guatemala	55
Guinea	8
Guyana	72
Haiti	30
Honduras	53
Hong Kong*	121
Hungary	103
India	37
Indonesia	49
Iran, Islamic Rep of	63
Iraq	60
Ireland	125
Israel	109
Italy	118
Jamaica	100
Japan	128
Jordan	79
Kampuchea, Dem	16
Kenya	52
Korea, Dem. Rep. of	89
Korea, Rep. of	88
Kuwait	99
Lao People's Dem Rep	34
Lebanon	80
Lesotho	43
Liberia	38
Libyan Arab Jamahiriya	48
Madagascar	24
Malawi	6
Malaysia	91
Mali	3
Mauritania	14
Mauritius	94
Mexico	73
Mongolia	78
Morocco	47
Mozambique	2
Myanmar	59
Namibia	26
Nepal	18
Netherlands	126
New Zealand	114
Nicaragua	58
Niger	10
Nigeria	28
Norway	123
Oman	76
Pakistan	33
Panama	86
Papua New Guinea	69
Paraguay	77
Peru	46
Philippines	71
Poland	104
Portugal	107
Romania	96
Rwanda	15
Saudi Arabia	56
Senegal	42
Sierra Leone	5
Singapore	113
Somalia	13
South Africa	57
Spain	115
Sri Lanka	83
Sudan	25
Sweden	130
Switzerland	129
Syrian Arab Rep.	75
Tanzania, U. Rep. of	27
Thailand	81
Togo	35
Trinidad & Tobago	98
Tunisia	68
Turkey	61
Uganda	31
USSR	92
United Arab Emirates	90
United Kingdom	117
USA	110
Uruguay	93
Venezuela	82
Viet Nam	64
Yemen	20
Yemen, Dem.	17
Yugoslavia	95
Zaire	41
Zambia	44
Zimbabwe	51

*Colony

TABLE 1: BASIC INDICATORS

		Under 5 mortality rate		Infant mortality rate (under 1)		Total population (millions)	Annual no. of births/infant and child deaths (0-4) (thousands)	GNP per capita (US $)	Life expectancy at birth (years)	Total adult literacy rate	% of age group enrolled in primary school Total	% share of household income 1975-1986	
		1960	1988	1960	1988	1988	1988	1987	1988	1985	1986-1988	lowest 40%	highest 20%
	Very high U5MR countries (over 170) Median	**314**	**203**	**190**	**127**	**489T**	**22588T/4684T**	**275**	**48**	**33**	**65**	..	..
1	Afghanistan	380	**300**	215	171	15.1	843/253	..	42	24	21	..	..
2	Mozambique	330	**298**	190	172	14.8	669/199	170	47	39	68	..	..
3	Mali	370	**292**	210	168	8.8	444/130	210	44	17	23	..	..
4	Angola	346	**292**	208	172	9.5	450/131	470[x]	45	41	93	..	..
5	Sierra Leone	386	**266**	219	153	3.9	191/51	300	41	30	58	..	..
6	Malawi	364	**262**	206	149	7.9	419/110	160	47	42	66	..	..
7	Ethiopia	294	**259**	175	153	44.7	2019/523	130	41	66[y]	37	..	..
8	Guinea	346	**248**	208	146	6.5	305/76	..	42	29	30	..	..
9	Burkina Faso	362	**233**	205	137	8.5	404/94	190	47	14	32	..	..
10	Niger	320	**228**	191	134	6.7	343/78	260	45	14	29	..	..
11	Chad	326	**223**	195	131	5.4	239/53	150	46	26	51	..	..
12	Central African Rep	308	**223**	183	131	2.8	123/27	330	46	41	66	..	..
13	Somalia	294	**221**	175	131	7.1	353/78	290	45	12[x]	..	..	..
14	Mauritania	320	**220**	191	126	1.9	89/20	440	46	17[y]	52	..	..
15	Rwanda	248	**206**	146	121	6.8	347/71	300	49	47	67	..	..
16	Kampuchea	218	**199**	146	127	7.9	319/63	..	49	75[x]	..	..	..
17	Yemen Dem	378	**197**	214	118	2.3	111/22	420	51	42	66	..	..
18	Nepal	297	**197**	186	127	18.2	714/141	160	51	26	76	..	..
19	Bhutan	297	**197**	186	127	1.5	56/11	150	48	..	26	..	..
20	Yemen	378	**190**	214	115	7.5	364/69	590	51	25[x]	91	..	..
21	Burundi	258	**188**	152	111	5.1	236/44	250	49	34[x]	67	..	..
22	Bangladesh	262	**188**	156	118	109.6	4642/873	160	51	33	70	17	45
23	Benin	310	**185**	185	109	4.4	226/42	310	47	27	63	..	..
24	Madagascar	364	**184**	219	119	11.2	516/95	210	54	68	94	..	..
25	Sudan	293	**181**	170	107	23.8	1062/192	330	50	24[x]	49	..	..
26	Tanzania	248	**176**	146	105	25.4	1291/227	180	53	91[y]	66	..	..
27	Namibia	262	**176**	155	105	1.8	15/3	..	56	..	..	..	..
28	Nigeria	318	**174**	190	104	105.5	5286/920	370	51	43	64	..	..
29	Bolivia	282	**172**	167	109	6.9	297/51	580	53	75	91	12[x]	58[x]
30	Haiti	294	**171**	197	116	6.3	215/37	360	55	38	78	..	..
	High U5MR countries (95–170) Median	**241**	**125**	**153**	**83**	**1486T**	**51592T/7237T**	**580**	**57**	**59**	**94**	..	..
31	Uganda	224	**169**	133	102	17.2	868/147	260	51	58	70	..	..
32	Gabon	288	**169**	171	102	1.1	43/7	2700	52	62	..	..	..
33	Pakistan	277	**166**	163	108	114.9	5263/874	350	57	30	40	..	..
34	Laos	232	**159**	155	109	3.8	159/25	170	49	84	94	..	..
35	Togo	305	**153**	182	93	3.2	146/22	290	53	41	101	..	..
36	Cameroon	275	**153**	163	93	10.7	451/69	970	51	56	109	..	..
37	India	282	**149**	165	98	818.8	26446/3940	300	58	43	98	16	49
38	Liberia	258	**147**	153	86	2.4	109/16	450	55	35	35	..	..
39	Ghana	224	**146**	132	89	14.1	624/91	390	54	54	71	..	..
40	Côte d'Ivoire	264	**142**	165	95	11.6	596/85	740	53	42	..	9	61
41	Zaire	251	**138**[x]	148	83[x]	33.8	1542/212	150	53	62	76	..	..
42	Senegal	313	**136**[x]	180	80[x]	7.0	320/44	520	46	28	60	..	..
43	Lesotho	208	**136**	149	99	1.7	68/9	370	56	73	115	..	..
44	Zambia	228	**127**	135	79	7.9	400/51	250	54	76	97	11	61
45	Egypt	300	**125**	179	83	51.5	1799/225	680	61	45	90	16	48
46	Peru	233	**123**	142	87	21.3	719/88	1470	62	85	..	7	61
47	Morocco	265	**119**	163	80	23.9	830/99	610	61	34	71	..	..
48	Libyan Arab Jamahiriya	268	**119**	160	80	4.2	188/22	5460	61	66	..	..	..
49	Indonesia	235	**119**	139	84	175.0	4822/574	450	56	74	118	14	49
50	Congo	241	**114**	143	72	1.9	84/10	870	49	63	..	..	..
51	Zimbabwe	182	**113**	110	71	9.1	379/43	580	59	74	128	..	..
52	Kenya	208	**113**	124	71	23.1	1238/140	330	59	60	96	9	60
53	Honduras	232	**107**	144	68	4.8	191/20	810	64	59	106	..	..
54	Algeria	270	**107**	168	73	23.8	940/101	2680	63	50	96	..	..
55	Guatemala	230	**99**	125	58	8.7	353/35	950	62	55	77	..	..
56	Saudi Arabia	292	**98**	170	70	13.1	557/55	6200	64	51[x]	71	..	..
57	South Africa	192	**95**	135	71	33.7	1062/101	1890	61	..	..	..	..
58	Nicaragua	210	**95**	140	61	3.6	150/14	830	64	88[y]	99	..	..
59	Myanmar	229	**95**	153	69	40.0	1242/118	200[x]	60	84[x]	81	..	..
	Middle U5MR countries (31–94) Median	**155**	**63**	**111**	**44**	**2170T**	**50388T/2781T**	**1400**	**66**	**84**	**104**	..	..
60	Iraq	222	**94**	139	68	17.7	751/71	3020[x]	64	89	98	..	..
61	Turkey	258	**93**	190	74	53.5	1502/140	1210	64	74[x]	117	11	56
62	Botswana	174	**92**	119	66	1.2	57/5	1050	59	71	114	..	..
63	Iran, Islamic Rep. of	254	**90**	169	61	53.1	2175/196	..	66	51	114	..	..
64	Viet Nam	233	**88**	156	63	64.2	2057/181	..	62	84	101	..	..
65	Ecuador	183	**87**	124	62	10.2	359/31	1040	66	83	117	..	..
66	Brazil	160	**85**	116	62	144.4	4066/346	2020	65	78	103	7	67
67	El Salvador	206	**84**	142	58	5.0	187/16	860	63	72	79	15	47
68	Tunisia	255	**83**	159	58	7.8	231/19	1180	66	55	116	..	..
69	Papua New Guinea	247	**81**	165	57	3.8	145/12	700	54	45	70	..	..
70	Dominican Rep	200	**81**	125	64	6.9	211/17	730	66	78	101	..	..
71	Philippines	135	**73**	80	44	59.5	1947/142	590	64	86	106	14	52
72	Guyana	94	**71**[x]	69	56[x]	1.0	25/2	390	70	96	90	..	..
73	Mexico	140	**68**	92	46	84.9	2439/166	1830	69	90	118	10	58
74	Colombia	148	**68**	93	46	30.6	878/60	1240	65	82[x]	114	..	..
75	Syria	218	**64**	135	47	11.6	512/33	1640	65	60	110	..	..
76	Oman	378	**64**	214	40	1.4	63/4	5810	56	30[x]	97	..	..
77	Paraguay	134	**62**	86	42	4.0	139/9	990	67	88	102	..	..
78	Mongolia	158	**59**	109	44	2.1	82/5	..	64	93	102	..	..
79	Jordan	218	**57**	135	43	3.9	182/10	1560	66	75	99	..	..
80	Lebanon	92	**51**	68	39	2.8	82/4	..	67	78	125	..	..
81	Thailand	149	**49**	103	38	54.1	1218/60	850	65	91	95	15	50
82	Venezuela	114	**44**	81	36	18.8	569/25	3230	70	87	107	10	54
83	Sri Lanka	113	**43**	70	32	16.8	380/16	400	70	87	104	16	50
84	China	202	**43**	150	31	1104.0	22202/955	290	70	69	132	..	..
85	Argentina	75	**37**	61	32	31.5	672/25	2390	71	95	110	14	50
86	Panama	105	**34**	69	23	2.3	61/2	2240	72	89	106	7	62
87	Albania	151	**34**	112	28	3.1	74/3	..	72	..	100	..	..
88	Korea Dem	120	**33**	85	24	21.9	623/21	..	69	..	..	..	..
89	Korea Rep	120	**33**	85	24	42.6	790/26	2690	69	92[x]	104	17	45
90	United Arab Emirates	239	**32**	145	25	1.5	33/1	15830	71	..	99	..	..
91	Malaysia	106	**32**	73	24	16.6	460/15	1810	70	74	102	11	56
92	USSR	53	**32**	38	25	283.7	5108/161	4550[x]	70	..	106	..	..
93	Uruguay	56	**31**	50	27	3.1	58/2	2190	71	95[x]	110	..	..
	Low U5MR countries (30 and under) Median	**44**	**12**	**37**	**10**	**950T**	**13043T/172T**	**7940**	**75**	**93**	**102**	**18**	**40**
94	Mauritius	104	**29**	70	22	1.1	21/1	1490	69	83	106	11	60
95	Yugoslavia	113	**28**	92	25	23.6	353/10	2480	72	91	95	19	39
96	Romania	82	**28**	69	22	23.0	356/10	2560[x]	70	..	97	..	..
97	Chile	142	**26**	114	19	12.7	299/8	1310	72	97[x]	102	..	..
98	Trinidad and Tobago	67	**23**	54	20	1.2	29/1	4210	70	96	100	13	50
99	Kuwait	128	**22**	89	19	1.9	61/1	14610	73	70	94	..	..
100	Jamaica	88	**22**	62	18	2.4	62/1	940	74	..	105	..	..
101	Costa Rica	121	**22**	84	18	2.9	79/2	1610	75	93	98	12	55
102	Bulgaria	69	**20**	49	15	9.0	115/2	4150[x]	72	..	104	..	..
103	Hungary	57	**19**	51	17	10.6	126/2	2240	70	..	97	20	36
104	Poland	70	**18**	62	16	38.0	620/11	2070[x]	71	..	101	..	..
105	Cuba	87	**18**	62	15	10.2	161/3	..	74	96[x]	104	..	..
106	Greece	84	**18**	53	13	10.0	121/2	4020	76	92	106	..	..
107	Portugal	112	**17**	81	14	10.2	140/2	2830	73	84	127	15	49
108	Czechoslovakia	32	**15**	26	12	15.6	222/3	5820[x]	71	..	96	..	..
109	Israel	40	**14**	33	11	4.4	96/1	6800	75	95	95	18	40
110	USA	30	**13**	26	10	245.4	3647/47	18530	75	..	100	17	40
111	Belgium	35	**13**	31	10	9.9	117/1	11480	75	..	100	22	36
112	Germany Dem	44	**12**	37	8	16.6	211/3	7180[x]	73	..	106	..	..
113	Singapore	50	**12**	36	9	2.6	43/1	7940	73	86	116	..	..
114	New Zealand	27	**12**	23	10	3.3	52/1	7750	75	..	107	16	45
115	Spain	56	**12**	46	9	39.1	503/6	6010	77	94	113	19	40
116	Denmark	25	**11**	22	8	5.1	55/1	14930	75	..	99	17	39
117	United Kingdom	27	**11**	23	9	56.8	755/8	10420	75	..	106	18	40
118	Italy	50	**11**	44	10	57.3	629/7	10350	76	97	95	17	44
119	Australia	25	**10**	21	9	16.4	243/2	11100	76	..	106	15	47
120	Germany Fed	40	**10**	33	8	60.7	635/6	14400	75	..	103	20	39
121	Hong Kong	65	**10**	44	8	5.7	87/1	8070	76	88	106	16	47
122	Austria	43	**10**	37	8	7.5	87/1	11980	74	..	101	..	..
123	Norway	23	**10**	19	8	4.2	52/1	17190	77	..	95	19	38
124	France	34	**10**	29	8	55.8	778/7	12790	76	..	113	17	42
125	Ireland	36	**9**	31	7	3.7	67/1	6120	74	..	100	20	39
126	Netherlands	22	**8**	18	8	14.6	174/1	11860	77	..	115	22	36
127	Canada	33	**8**	28	7	26.1	362/3	15160	77	..	105	17	40
128	Japan	40	**8**	31	5	122.4	1455/12	15760	78	..	102	22	38
129	Switzerland	27	**8**	22	7	6.5	75/1	21330	77	..	..	20	38
130	Sweden	20	**7**	16	6	8.3	93/1	15550	77	..	100	20	42
131	Finland	28	**7**	22	6	5.0	62/(.)	14470	75	..	101	18	38

Note: nations are listed in descending order of their 1988 under five mortality rates (shown in bold type).

TABLE 2: NUTRITION

		% of infants with low birth weight 1982-88	% of mothers breast-feeding 1980-87			% of children (1980-87) suffering from:			Average index of food production per capita (1979-81 = 100) 1988	Daily per capita calorie supply as % of requirements 1984-86	% of household income spent on all food/cereals 1980-85
			3 months	6 months	12 months	moderate & severe/severe underweight (0-4 years)	moderate & severe wasting (12-23 months)	moderate & severe stunting (24-59 months)			
	Very high U5MR countries (over 170) Median	**16**	**96**	**92**	**82**	**36/8**	**17**	**46**	**95**	**90**	**52/18**
1	Afghanistan	20				/				94	/
2	Mozambique	20x	99x	96x		57/8			84	69	/
3	Mali	17x	96x		82x	31x/9x	16	34x	108	86	57/22
4	Angola	17x				/			85	82	/
5	Sierra Leone	17x	98x	94x	83x	23x/3x	26	46	89	81	47/18
6	Malawi	20x			96x	22/	8	61	83	102	55/28
7	Ethiopia			97x	95x	38x/	19x	43x	94	71	32/12
8	Guinea		100x	70x	40x	/			90	77	/
9	Burkina Faso		98x	98x	97x	/			121	86	/
10	Niger	15x	65x	30x	15x	49/	23x	38x	98	100	/
11	Chad	11x				/			105	69	/
12	Central African Rep	5x				30x/6x			83	86	/
13	Somalia					/			98	90	/
14	Mauritania	11	91	86	67	44x/8x			91	92	/
15	Rwanda	17x	97x	97x	74x	37x/8x	23	45	75	81	29/10
16	Kampuchea		100x	93x		20x/3x			141	98	/
17	Yemen Dem	13x	80x	60x	55x	26x/	8	36x	86	96	/
18	Nepal		92x	92x	82x	/			102	93	/
19	Bhutan					/			118		/
20	Yemen		73x	67x	29x	61x/	17x	69x	105	94	/
21	Burundi	9x		95x	90x	38x/10x	10	60x	102	97	/
22	Bangladesh	28	91x	86x	82x	60x/9x	17x	59x	88	83	/
23	Benin	8x	90	90	76	34x/	14		112	95	37/12
24	Madagascar	10x	95x	95x	85x	33x/8x	18	41x	91	106	58/22
25	Sudan		91x	86x	72x	41x/8x	13x		100	88	58/
26	Tanzania	14	100x	90x	70x	48/6	17		86	96	62/30
27	Namibia					/			98	82	/
28	Nigeria	20x	98x	80x	60x	/	21x		96	90	52/18
29	Bolivia	12x				15x/	1	46	95	89	33/
30	Haiti	17x		98x	88x	27x/3x	17x	51x	89	84	/
	High U5MR countries (95-170) Median	**14**	**92**	**90**	**77**	**24/4**	**7**	**34**	**95**	**102**	**43/13**
31	Uganda		85x	70x	20x	/	3x	32x	82	95	/
32	Gabon					/			82	107	/
33	Pakistan	25x		92	70	39x/10x	17x	42x	104	97	54/17
34	Laos	39		99x	93x	37/	20	44	110	104	/
35	Togo	20x		99x	90x	/			87	97	/
36	Cameroon	13x	92x	90x	77x	17x/	2x	43x	95	88	26/8
37	India	30				41x/6x			112	100	52/
38	Liberia		96x	92x	70x	35x/4x	7x	38x	93	102	/
39	Ghana	17x	91	90	72	37x/	28	31	108	76	50/
40	Côte d'Ivoire	14x	87	84	78	40x/	4x	10x	94	110	38/10
41	Zaire	13	100x	100x	86x	20x/5x	11	40x	94	98	55/15
42	Senegal	11x	94x	94x	82x	22x/6x	8	28x	103	99	53/16
43	Lesotho	11		87x		16x/2x	7	23	86	101	/
44	Zambia	14x			93x	28/	12x	41x	92	92	50/13
45	Egypt	5x	90	87	81	11x/1x	3x	34	120	132	36/7
46	Peru	9	80x	67x	37x	13x/2x	3	43	103	93	35/8
47	Morocco		92x	89x	76x	16x/4x	6	34x	122	118	48/14
48	Libyan Arab Jamahiriya					/			90	153	/
49	Indonesia	14x	98x	97x	83x	51x/1x	17x		119	116	48/21
50	Congo	12x	98x	98x	95x	24/5x	13	33	94	117	31/12
51	Zimbabwe	15x	98	96	84	12x/	1x	29x	97	89	43/9
52	Kenya	15	86x	82x	67x	/	10x	42x	90	92	42/18
53	Honduras	20x	48x	28x	24x	21/4	2x	34x	87	92	39/
54	Algeria	9x				/			95	112	/
55	Guatemala	10x		84x	74x	34x/8x	3	68x	96	105	36/10
56	Saudi Arabia	6x		91x	52x	/			236	125	/
57	South Africa	12x				/			88	120	/
58	Nicaragua	15			71x	11/1	( )	22	65	110	/
59	Myanmar	16x				38x/	17	75x	124	119	/
	Middle U5MR countries (31-94) Median	**9**	**80**	**70**	**48**	**22/3**	**7**	**34**	**97**	**113**	**35/10**
60	Iraq	9x	..	..	..	../..	..	..	102	124	../..
61	Turkey	8x	99x	91x	51x	12x/1x	..	..	98	125	40/..
62	Botswana	8x	96	93	73	15/..	19x	51x	75	96	35/13
63	Iran, Islamic Rep. of	5	..	..	..	43x/..	23x	55x	89	138	../..
64	Viet Nam	18x	..	..	..	52/13	12	60x	114	105	../..
65	Ecuador	10x	86	74	48	10x/(.)x	4	39	92	89	31/..
66	Brazil	8x	66	58	34	13x/3x	2x	31x	111	111	35/9
67	El Salvador	15x	85	77	55	55/5	..	54x	88	94	33/12
68	Tunisia	7x	95x	92x	71x	../..	3x	45x	90	123	42/10
69	Papua New Guinea	25x	..	..	..	35/..	..	58	97	96	../..
70	Dominican Rep.	16x	..	..	..	12x/3x	3	26x	91	109	46/13
71	Philippines	18x	79x	70x	53x	33x/..	7	42	88	104	47/..
72	Guyana	11	62x	38x	22x	22/4	9	21	69	108	../..
73	Mexico	15x	62x	52x	36x	../..	..	..	93	135	35/..
74	Colombia	15x	80x	55x	36x	12x/2x	1	27x	101	110	29/..
75	Syria	..	88x	72x	41x	25x/2x	..	..	95	131	../..
76	Oman	6	73x	50x	20x	../..	..	..	..	..	../..
77	Paraguay	7x	80x	77x	49x	32x/1x	..	..	117	123	30/6
78	Mongolia	10	..	..	..	../..	..	..	95	116	../..
79	Jordan	5x	80x	70x	50x	../..	..	..	117	121	36/..
80	Lebanon	..	50x	40x	15x	../..	..	..	..	125	../..
81	Thailand	12	83	79	66	26x/4x	10	28x	104	105	34/..
82	Venezuela	9x	50x	40x	30x	10/..	3	7	92	102	38/..
83	Sri Lanka	28x	94	92	81	38x/9x	19	34x	88	110	48/21
84	China	5x	70x	60x	..	../..	..	..	127	111	../..
85	Argentina	..	66	36	14	../..	..	..	96	136	35/4
86	Panama	8	62	53	53	16/..	7	24	93	107	38/7
87	Albania	7	..	..	..	../..	..	..	95	114	../..
88	Korea Dem	..	..	..	..	../..	..	..	109	135	../..
89	Korea Rep	6	58x	40x	27x	../..	..	..	100	122	35/..
90	United Arab Emirates	7x	..	..	..	../..	..	..	..	..	../..
91	Malaysia	10	88x	..	..	../..	12x	33x	138	121	30/..
92	USSR	6	..	..	..	../..	..	..	109	133	../..
93	Uruguay	8x	50x	43x	..	7x/2x	..	16x	102	100	31/7
	Low U5MR countries (30 and under) Median	**6**	**47**	**30**	**..**	**../..**	**..**	**..**	**102**	**128**	**../..**
94	Mauritius	9x	79	55	40	24/7	16x	22x	99	121	20/4
95	Yugoslavia	7x	..	..	..	../..	..	..	98	139	../..
96	Romania	6	..	..	..	../..	..	..	110	127	../..
97	Chile	7	23x	18x	17x	3x/..	1	10x	108	106	29/7
98	Trinidad and Tobago	..	59x	50x	14x	7x/..	5	4x	71	126	../..
99	Kuwait	7	47x	32x	12x	6/..	2	14	..	..	../..
100	Jamaica	8x	95	82	43	9x/2x	5x	9x	98	116	38/..
101	Costa Rica	10	61	38	22	6/..	3	8	86	124	33/8
102	Bulgaria	6	..	..	..	../..	..	..	102	145	../..
103	Hungary	10	86	..	..	../..	..	..	106	135	../..
104	Poland	8	32x	25x	..	../..	..	..	102	126	../..
105	Cuba	8	..	..	..	../..	1x	..	105	135	../..
106	Greece	6	..	..	..	../..	..	..	100	147	../..
107	Portugal	5	29	12	7	../..	..	..	102	128	../..
108	Czechoslovakia	6	..	..	..	../..	..	..	122	141	../..
109	Israel	7	..	..	..	../..	..	..	100	118	../..
110	USA	7	33	24	..	../..	..	..	85	138	../..
111	Belgium	5	..	..	..	../..	..	..	116	146	../..
112	Germany Dem	6	..	..	..	../..	..	..	117	145	../..
113	Singapore	6	..	..	..	../..	..	..	83	124	19/..
114	New Zealand	5	..	..	..	../..	..	..	111	129	../..
115	Spain	1	..	..	..	../..	..	..	110	137	../..
116	Denmark	6	..	..	..	../..	..	..	119	131	../..
117	United Kingdom	7	26	22	..	../..	..	..	105	128	../..
118	Italy	7x	..	..	..	../..	..	..	98	39	../..
119	Australia	6x	56	40	10	../..	..	..	97	125	../..
120	Germany Fed	6x	..	..	..	../..	..	..	112	130	../..
121	Hong Kong	5	..	..	..	../..	..	..	54	121	19/3
122	Austria	6	41	..	..	../..	..	..	104	130	../..
123	Norway	4x	..	..	..	../..	..	..	109	120	../..
124	France	5	..	..	..	../..	..	..	100	130	../..
125	Ireland	4	..	..	..	../..	..	..	98	146	../..
126	Netherlands	..	33x	..	..	../..	..	..	111	121	../..
127	Canada	6	53	30	..	../..	..	..	93	129	../..
128	Japan	5	72	52	..	../..	..	..	98	122	../..
129	Switzerland	5x	..	..	..	../..	..	..	108	128	../..
130	Sweden	4	47	23	..	../..	..	..	92	113	../..
131	Finland	4	..	7x	..	../..	..	..	99	113	../..

Note: nations are listed in descending order of their 1988 under five mortality rates (see table 1)

TABLE 3: HEALTH

		% of population with access to safe water 1985-87	% of population with access to health services 1985-87	Percentage fully immunized 1981/1987-88					ORS use rate 1986-87
				one-year-old children				pregnant women	
		Total/urban/rural	Total/urban/rural	TB	DPT	Polio	Measles	Tetanus	
	Very high U5MR countries (over 170) Median	**34/ 69/21**	**41/ 80/30**	**26/53**	**14/30**	**9/30**	**21/38**	**5/20**	**11.4**
1	Afghanistan	21/ 38/17	29/ 80/17	8/27	3/25	3/25	6/31	3/6	10.8
2	Mozambique	16/ 38/ 9	39/100/30	46/49	56/38	32/38	32/44	../43	13.5
3	Mali	17/ 46/10	15/../..	19/64	../18	../18	../23	1/17	2.2
4	Angola	30/ 87/15	30/../..	../32	../12	../13	../56	../19	12.0
5	Sierra Leone	25/ 68/ 7	../../..	35/73	15/25	13/25	28/38	10/50	11.4
6	Malawi	56/ 97/50	80/../..	86/90	66/82	68/80	65/78	../63	9.9
7	Ethiopia	16/ 69/ 9	46/../..	10/27	6/16	7/16	7/13	../7	22.5
8	Guinea	19/ 41/12	32/../..	4/31	../16	../16	15/27	5/6	1.0
9	Burkina Faso	67/ 43/69	49/ 51/48	16/73	2/30	2/30	23/49	11/15	15.0
10	Niger	47/ 35/49	41/ 99/30	28/39	6/16	6/16	19/24	3/8	0.6
11	Chad	../../..	30/../..	../38	../14	../14	../17	../10	1.8
12	Central African Rep	../ 13/..	45/../..	26/53	12/24	12/24	16/30	13/20	14.6
13	Somalia	34/ 58/22	27/ 50/15	3/33	../25	2/25	3/28	5/26	11.7
14	Mauritania	../ 73/..	30/../..	57/79	18/28	18/28	45/45	1/..	1.5
15	Rwanda	50/ 79/48	27/ 60/25	51/91	17/80	15/78	42/79	5/43	4.0
16	Kampuchea	3/ 10/ 2	53/ 80/50	../58	../45	../45	../38	../3	5.8
17	Yemen Dem	54/ 85/32	30/../..	9/50	5/35	5/35	6/28	3/5	10.1
18	Nepal	29/ 70/25	../../..	32/91	16/71	1/71	2/52	4/31	14.0
19	Bhutan	../../19	65/../..	30/86	13/70	11/76	21/36	../42	40.0
20	Yemen	42/100/25	35/ 75/24	15/41	25/29	25/29	40/28	../3	5.8
21	Burundi	26/ 98/21	61/../..	65/66	38/54	6/54	30/41	25/69	29.5
22	Bangladesh	46/ 24/49	45/../..	1/26	1/16	1/16	../13	1/11	15.0
23	Benin	52/ 80/34	18/../..	../50	../30	../30	../30	../7	12.5
24	Madagascar	32/ 81/17	56/../..	25/62	40/40	../38	../35	../6	2.1
25	Sudan	21/ 60/10	51/ 90/40	3/67x	1/53x	1/53x	1/57x	1/20x	23.1
26	Tanzania	56/ 90/42	76/ 99/72	78/94	58/81	49/81	76/88	36/54	10.6
27	Namibia	../../..	../../..	../..	../..	../..	../..	../..	..
28	Nigeria	46/100/20	40/ 75/30	23/72	24/58	24/57	55/59	11/20	10.5
29	Bolivia	44/ 75/13	63/ 90/36	30/27	13/39	15/40	17/44	../25	21.0
30	Haiti	38/ 59/30	70/ 80/70	60/45	14/49	3/48	../59	../56	14.1
	High U5MR countries (95–170) Median	**50/ 75/27**	**69/ 95/50**	**55/81**	**36/63**	**34/64**	**23/56**	**10/26**	**11.8**
31	Uganda	20/ 37/18	61/ 90/57	18/77	9/40	8/41	22/49	20/14	5.2
32	Gabon	92/../..	90/../..	../96	../68	../68	../71	../60	6.8
33	Pakistan	44/ 83/27	55/ 99/35	11/77	3/64	3/64	2/55	1/26	41.5
34	Laos	21/ 28/20	67/../..	4/27	7/17	7/17	7/19	2/7	7.3
35	Togo	55/ 99/41	61/../..	44/95x	9/62x	9/60x	47/74x	57/72x	8.1
36	Cameroon	33/ 43/24	41/ 44/39	8/77	5/45	5/43	16/44	../26	11.5
37	India	57/ 76/50	../../..	12/72	31/73	7/64	../44	24/58	12.0
38	Liberia	55/100/23	39/ 50/30	87/62	39/28	26/28	99/55	60/20	6.0
39	Ghana	56/ 93/39	60/ 92/45	67/56	22/33	25/33	23/47	11/19	10.0
40	Côte d'Ivoire	19/ 30/10	30/ 61/11	70/52	42/32	34/32	28/30	25/46	4.3
41	Zaire	33/ 52/21	26/ 40/17	34/59	18/41	18/41	23/44	../43	10.0
42	Senegal	53/ 79/38	40/../..	../81	../47	../47	../53	../24	3.0
43	Lesotho	36/ 65/30	80/../..	81/90	56/77	54/77	49/79	../..	27.0
44	Zambia	59/ 76/41	75/../100	72/92	44/83	77/81	21/80	../45	32.0
45	Egypt	73/ 92/56	../../..	71/80	82/87	84/87	65/84	10/88	51.0
46	Peru	55/ 73/17	75/../..	63/73	18/66	18/67	24/57	4/8	3.6
47	Morocco	60/100/25	70/100/50	../78	43/61	45/61	../58	../33	14.7
48	Libyan Arab Jamahiriya	97/100/90	../../..	55/92x	55/52x	55/52x	57/52x	6/12x	9.6
49	Indonesia	38/ 43/36	80/../..	55/82	../69	../70	../61	10/33	55.0
50	Congo	21/ 42/ 7	83/ 97/70	92/88	42/71	42/71	49/73	../47	2.0
51	Zimbabwe	../../32	71/100/62	64/89	39/79	38/79	56/75	../22	1.3
52	Kenya	30/ 61/21	../../..	../87	../74	../75	../60	../62	26.0
53	Honduras	50/ 56/45	73/ 85/65	46/85	38/74	37/70	38/76	11/16	45.0
54	Algeria	68/ 85/55	88/100/80	59/95	33/65	30/65	17/58	../..	15.0
55	Guatemala	38/ 72/14	34/ 47/25	29/38	42/47	42/55	8/54	1/18	17.0
56	Saudi Arabia	97/100/88	97/100/88	49/93	53/89	52/89	12/80	../50	38.5
57	South Africa	../../..	../../..	../..	../..	../..	../..	../..	..
58	Nicaragua	49/ 76/11	83/100/60	65/89	23/51	52/83	20/55	../25	23.0
59	Myanmar	27/ 36/24	33/100/11	15/45	5/23	../13	../14	6/24	21.1
	Middle U5MR countries (31–94) Median	**76/ 90/52**	**80/ 96/67**	**60/85**	**47/78**	**47/80**	**43/69**	**18/40**	**25.0**
60	Iraq	87/100/54	93/ 97/70	76/87	13/86	16/86	33/78	4/56	43.9
61	Turkey	78/ 95/63	../../..	42/64	64/77	69/77	52/65	../7	..
62	Botswana	54/ 84/46	89/100/85	80/99	64/89	71/89	68/83	32/61	35.0
63	Iran, Islamic Rep of	76/ 95/55	78/ 95/60	6/73	29/80	47/80	48/90	2/50	15.0
64	Viet Nam	46/ 70/39	80/100/75	../64x	../56x	../58x	../54x	../..	20.0
65	Ecuador	58/ 81/31	62/ 90/30	82/86	26/54	19/57	31/52	4/5	24.0
66	Brazil	78/ 85/56	../../..	62/67	47/54	99/89	73/60	../..	32.0
67	El Salvador	52/ 68/40	56/ 80/40	47/65	42/61	38/62	44/63	20/19	26.0
68	Tunisia	68/100/31	90/100/80	65/85	36/91	37/91	65/83	2/34	20.1
69	Papua New Guinea	27/ 95/15	../../..	64/79	50/48	32/48	../46	../17	10.5
70	Dominican Rep	63/ 85/33	80/../..	34/51	27/80	42/79	17/71	26/87	32.0
71	Philippines	52/ 49/54	../../..	61/95	51/79	44/78	../77	37/37	10.0
72	Guyana	77/100/65	89/../..	../64	45/64	37/69	../55	../57	9.8
73	Mexico	77/ 89/47	45/../..	41/72	41/60	85/95	33/70	../..	27.9
74	Colombia	92/100/76	60/../..	57/99	20/74	22/94	26/74	6/40	5.6
75	Syria	76/ 98/54	76/ 92/60	36/86	14/58	14/58	14/51	3/40	28.4
76	Oman	53/ 90/49	91/100/90	49/96	9/88	9/88	6/86	27/70	18.6
77	Paraguay	29/ 53/ 8	61/ 90/38	42/56	28/57	26/82	16/63	6/64	32.4
78	Mongolia	../../..	../../..	53/53	99/79	99/74	../61	../..	41.0
79	Jordan	96/100/88	97/ 98/95	../2	81/98	87/98	40/87	2/54	37.0
80	Lebanon	93/ 95/85	../../..	../..	../91	../91	../81	../..	2.9
81	Thailand	64/ 56/66	70/../..	71/97	52/80	22/80	../60	27/61	30.0
82	Venezuela	90/ 93/65	../../..	77/78x	54/51	75/68	43/49	../..	28.0
83	Sri Lanka	40/ 82/29	93/../..	58/81	45/83	49/85	../68	48/38	34.6
84	China	../ 85/..	../../..	../98	../96	../95	../95	../..	5.0
85	Argentina	56/ 63/17	71/ 80/21	63/74	46/61	38/70	73/68	../..	2.9
86	Panama	83/100/64	80/ 95/64	77/91	49/75	50/73	53/75	../27	34.0
87	Albania	../../..	../../..	93/92	94/96	92/94	90/96	../..	..
88	Korea Dem	../../..	../../..	52/69	52/62	51/70	31/35	../..	0.2
89	Korea Rep	77/ 90/48	93/ 97/86	42/86	61/86	62/87	5/96	../..	..
90	United Arab Emirates	../../..	90/../..	18/92	45/71	45/71	42/58	../..	13.0
91	Malaysia	84/ 96/76	../../..	91/96	54/72	61/72	../54	20/53	10.6
92	USSR	../../..	../../..	../93x	35/79x	95/80x	95/79x	../..	..
93	Uruguay	85/ 95/27	82/../..	76/98	57/82	58/82	95/72	18/13	50.4
	Low U5MR countries (30 and under) Median	../../..	../../..	**../90**	**84/90**	**90/94**	**70/83**	../..	..
94	Mauritius	100/100/100	100/100/100	87/88	82/87	82/87	../73	1/65	4.4
95	Yugoslavia	../../..	../../..	99/87	90/90	95/90	95/92	../..	..
96	Romania	../../..	../../..	../95	../92	../94	../90	../..	..
97	Chile	94/ 98/71	97/../..	100/98	97/96	96/96	93/95	../..	..
98	Trinidad and Tobago	98/100/95	99/../..	../..	52/80	55/82	../72	../60	53.1
99	Kuwait	../ 97/..	100/../..	../3	54/69	76/69	66/63	30/2	9.6
100	Jamaica	96/ 99/93	90/../..	../96	39/82	37/83	../68	50/50	6.2
101	Costa Rica	91/100/83	80/100/63	81/87	83/87	85/86	71/97	../90	73.0
102	Bulgaria	../../..	../../..	97/99	97/99	98/99	98/99	98/..	..
103	Hungary	../../..	../../..	99/99	99/99	98/99	99/99	../..	..
104	Poland	../../..	../../..	95/95	95/98	95/99	65/96	../..	..
105	Cuba	../../..	../../..	97/98	67/94	82/94	49/85	../..	70.0
106	Greece	../../..	../../..	95/..	95/83	95/93	../82	../..	..
107	Portugal	../../..	../../..	74/71	75/78	16/80	70/84	../..	..
108	Czechoslovakia	../../..	../../..	95/99	95/99	95/98	95/98	../..	..
109	Israel	../../..	../../..	70/..	84/87	91/93	69/89	../..	..
110	USA	../../..	../../..	../..	../37	../24	96/82x	../..	..
111	Belgium	../../..	../../..	../90	95/95	99/97	50/50	../..	..
112	Germany Dem	../../..	../../..	95/99	80/94	90/97	95/99	../..	..
113	Singapore	100/100/..	100/100/..	83/92	87/98	88/97	57/94	../90	..
114	New Zealand	../../..	../../..	../20x	72/70x	../84x	../60x	../..	..
115	Spain	../../..	../../..	../..	../74	../78	../81	../..	..
116	Denmark	../../..	../../..	95/85	85/94	97/100	../82	../..	..
117	United Kingdom	../../..	../../..	../96	44/70	71/87	52/76	../..	..
118	Italy	../../..	../../..	../30	../88	../95	../21	../..	..
119	Australia	../../..	../../..	../..	../..	../..	../68x	../..	..
120	Germany Fed	../../..	../../..	40/30x	50/97x	80/95x	35/50x	../..	..
121	Hong Kong	../../..	../../..	99/99	84/94	94/86	../85	../90	..
122	Austria	../../..	../../..	90/90	90/90	90/90	90/60	../..	..
123	Norway	../../..	../../..	../90	../80	../80	../87	../..	..
124	France	../../..	../../..	80/98	79/96	80/97	../41	../..	..
125	Ireland	../../..	../../..	../80	36/45	76/90	../63	../..	..
126	Netherlands	../../..	../../..	../..	97/97	97/97	93/93	../..	..
127	Canada	../../..	../../..	../..	../85	../85	../85	../..	..
128	Japan	../../..	../../..	85/85x	../83x	../95x	../73x	../..	..
129	Switzerland	../../..	../../..	../90	../92	../98	../70	../..	..
130	Sweden	../../..	../../..	../12x	99/99x	99/98x	56/93x	../..	..
131	Finland	../../..	../../..	90/80x	92/94x	90/95x	70/87x	../..	..

Note: nations are listed in descending order of their 1988 under five mortality rates (see table 1)

TABLE 4: EDUCATION

		Adult literacy rate		No. of radio/television sets per 1,000 population 1986/7	Primary-school enrolment ratio			% of grade 1 enrolment completing primary school 1985-1987	Secondary-school enrolment ratio 1986-1988 (gross) male/female
		1970 male/female	1985 male/female		1960 (gross) male/female	1986-88 (gross) male/female	1986-88 (net) male/female		
	Very high U5MR countries (over 170) Median	**25/8**	**43/22**	**61/4**	**29/12**	**69/43**	**50/32**	**40**	**18/6**
1	Afghanistan	13/2	39/8	102/8	15/2	27/14	/	63	10/5
2	Mozambique	29/14	55/22	38/1	60/36	76/59	49/41	39	7/4
3	Mali	11/4	23/11	37/	14/6	29/17	23/14	39	9/4
4	Angola	16/7	49/33	49/5	/	/	/		/
5	Sierra Leone	18/8	38/21	216/8	30/	68/48	/		23/11
6	Malawi	42/18	52/31	197/	/45	73/59	50/47	33	5/3
7	Ethiopia	8/( )	/	193/2	11/3	46/28	32/22	41*	18/12
8	Guinea	21/7	40/17	33/2	44/16	41/18	31/15	70	13/4
9	Burkina Faso	13/3	21/6	24/5	12/5	41/24	34/20	74	8/4
10	Niger	6/2	19/9	62/3	7/3	37/20	/	75	/
11	Chad	20/2	40/11	237/1	29/4	73/29	52/23	17	10/2
12	Central African Rep	26/6	53/29	60/2	53/12	82/51	59/39	17	17/6
13	Somalia	5/1	18*/6*	38/( )	13/13	/	19/10	33*	/
14	Mauritania	/	/	139/1	13/3	61/42	/	92	23/9
15	Rwanda	43/21	61/33	54/	/	69/66	65/63	49	7/5
16	Kampuchea	/23	85*/65*	106/8	/	/	/	50*	45/20
17	Yemen Dem	31/9	59/25	154/21	20/5	96/35	/	40*	26/11
18	Nepal	23/3	39/12	31/1	19/1	104/47	76/35	28*	35/11
19	Bhutan	/	/	15/	5/	31/20	/		7/2
20	Yemen	9/1	42*/7*	34/8	14/	141/40	/	15*	46/6
21	Burundi	29/10	43*/26*	56/( )	27/9	68/50	46/37	87	6/3
22	Bangladesh	36/12	43/22	40/3	66/26	76/64	67/44	20	24/11
23	Benin	23/8	37/16	75/4	38/15	84/43	66/34	36	23/9
24	Madagascar	56/43	74/62	193/6	58/45	97/92	89/	30*	23/19
25	Sudan	28/6	33*/14*	229/52	35/14	59/41	/	61*	23/17
26	Tanzania	48/18	93^{y}/88^{y}	16/1	33/18	67/66	50/51	76	5/3
27	Namibia	/	/	123/11	/	/	/		/
28	Nigeria	35/14	54/31	163/6	46/27	/	97/85	63*	/
29	Bolivia	68/46	84/65	527/77	78/50	97/85	88/78		40/35
30	Haiti	26^{x}/17^{x}	40/35	41/4	50/42	83/72	45/42	15	19/17
	High U5MR countries (95-170) Median	**48/20**	**66/45**	**125/22**	**65/37**	**100/81**	**. ./. .**	**64**	**32/26**
31	Uganda	52/30	70/45	96/6	/32	76/63	43/38	76	16/9
32	Gabon	43/22	70/53	119/23	/	/	/	59	/
33	Pakistan	30/11	40/19	86/14	46/13	51/28	/	49^{y}	26/11
34	Laos	37/28	92/76	123/2	34/16	102/85	/	14*	23/16
35	Togo	27/7	53/28	178/5	63/24	124/78	87/59	59	36/12
36	Cameroon	47/19	68/45	125/12	87/43	119/100	/	67	32/20
37	India	47/20	57/29	77/7	80/40	113/81	/		50/27
38	Liberia	27/8	47/23	224/18	45/18	82/50	/		/
39	Ghana	43/18	64/43	292/13	52/25	78/63	/		49/32
40	Côte d'Ivoire	26/10	53/31	131/54	68/24	/	/	68	26/12
41	Zaire	61/22	79/45	98/1	88/32	84/68	86/65	60	32/14
42	Senegal	18/5	37/19	103/32	36/0	71/49	59/41	83	19/10
43	Lesotho	49/74	62/84	68/1	63/102	102/127	/	52	18/26
44	Zambia	66/37	84/67	73/15	51/34	102/92	/	91	/
45	Egypt	50/20	59/30	310/83	80/52	100/79	/	64	79/58
46	Peru	81/60	91/78	241/84	95/71	125/120	/	51*	68/61
47	Morocco	34/10	45/22	206/56	67/27	85/56	68/46	69	43/30
48	Libyan Arab Jamahiriya	60/13	81/50	221/63	92/24	/	/	82	/
49	Indonesia	66/42	83/65	145/40	86/58	120/115	99/97	80	/
50	Congo	50/19	71/55	120/3	103/53	/	/	75	/
51	Zimbabwe	63/47	81/67	85/22	/	130/126	100/100	74	49/42
52	Kenya	44/19	70/49	90/6	64/30	98/93	/	62	27/19
53	Honduras	55/50	61/58	376/67	68/67	104/108	/	43	/
54	Algeria	39/11	63/37	227/70	55/37	105/87	97/81	90	61/46
55	Guatemala	51/37	63/47	65/37	50/39	82/70	/	36	/
56	Saudi Arabia	15/2	71^{x}/31^{x}	272/268	22/	78/65	64/48	90	52/35
57	South Africa	/	/	319/97	94/85	/	/		/
58	Nicaragua	58/57	/	237/60	65/66	94/104	74/79	20	29/58
59	Myanmar	85/57	/	79/1	61/52	/	/	27*	/
	Middle U5MR countries (31-94) Median	**75/65**	**86/77**	**226/82**	**95/85**	**105/104**	**90/89**	**76**	**56/55**
60	Iraq	50/18	90/87	199/64	94/36	105/91	91/82	71	60/38
61	Turkey	69/34	86^{x}/62^{x}	160/172	90/58	121/113	/	85*	57/34
62	Botswana	37/44	73/69	130/7	35/48	111/117	85/93	89	31/33
63	Iran, Islamic Rep. of	40/17	62/39	236/53	56/27	122/105	98/89	83	57/39
64	Viet Nam	/	88*/80	99/34	/	107/94	/	50*	44/41
65	Ecuador	75/68	85/80	292/81	87/79	118/116	/	50*	55/57
66	Brazil	69/63	79/76	368/191	97/93	/	/	22	32/41
67	El Salvador	61/53	75/69	401/82	/	77/81	61/62	31	27/30
68	Tunisia	44/17	68/41	171/68	88/43	126/107	100/89	77	46/34
69	Papua New Guinea	39/24	55/35	64/2	59/7	75/64	/	67*	16/9
70	Dominican Rep	69/65	78/77	164/79	99/98	99/103	80/78	35	/
71	Philippines	84/81	86/85	135/36	98/93	105/107	94/94	75	66/66
72	Guyana	94/89	97/95	303/15	107/106	/	/	84	/
73	Mexico	78/69	92/88	241/120	82/77	119/116	/	71	54/53
74	Colombia	79/76	82*/82*	167/108	77/77	112/115	72/74	57	55/56
75	Syria	60/20	76/43	231/58	89/39	115/104	100/94	67*	69/48
76	Oman	/	47*/12*	649/739	/	103/92	83/77	89	46/29
77	Paraguay	85^{x}/75^{x}	91/85	165/24	105/90	104/99	86/84	50	30/30
78	Mongolia	87/74	95/90	128/31	79/78	100/103	/		88/96
79	Jordan	64/29	87/63	237/69	94/59	98/99	88/88	96	80/78
80	Lebanon	79^{x}/58^{x}	86/69	772/302	105/99	105/95	/		57/56
81	Thailand	86/72	94/88	174/103	88/79	/	/	64*	/
82	Venezuela	79/71	88/85	395/142	100/100	107/107	/	73	48/59
83	Sri Lanka	85/69	91/83	187/31	100/90	105/102	100/100	88	63/69
84	China	/	82/56	184/17	/	140/124	99/91	68*	*50/37
85	Argentina	94/92	96/95	659/217	98/99	110/110	/		69/78
86	Panama	81/81	89/88	220/163	98/94	109/104	90/89	82	56/63
87	Albania	/	/	167/83	102/86	100/99	/		80/71
88	Korea Dem	/	/	110/12	/	/	/	99	/
89	Korea Rep	94/81	96^{x}/88^{x}	986/194	99/89	104/104	100/99	99	91/86
90	United Arab Emirates	24/7	/	319/106	/	98/100	88/89	82	55/66
91	Malaysia	71/48	81/66	436/140	108/83	102/102	/	97	59/59
92	USSR	98/97	/	685/314	100/100	/	/	80	/
93	Uruguay	93^{x}/93^{x}	/	594/173	111/111	111/109	/	86	/
	Low U5MR countries (30 and under) Median	**93/88**	**97/90**	**579/290**	**105/103**	**103/101**	**97/97**	**95**	**83/85**
94	Mauritius	77/59	89/77	263/188	103/93	105/107	93/95	96	53/50
95	Yugoslavia	92/76	97/86	344/175	113/108	95/94	/	98	82/79
96	Romania	96/91	/	288/166	101/95	/	/		79/80
97	Chile	90/88	97^{x}/96^{x}	335/163	111/107	103/101	/	33*	72/76
98	Trinidad and Tobago	95/89	97/95	457/290	89/87	99/100	87/88	84	80/85
99	Kuwait	65/42	76/63	327/261	131/102	95/92	81/77	91	86/79
100	Jamaica	96/97	/	400/108	92/93	104/106	/		62/67
101	Costa Rica	88/87	94/93	258/79	97/95	100/97	85/85	81	40/43
102	Bulgaria	94/89	/	357/189	94/92	105/103	/	90	75/76
103	Hungary	98/98	/	586/402	103/100	97/97	94/96	92	69/70
104	Poland	98/97	/	289/263	110/107	101/101	99/99	94	78/82
105	Cuba	86/87	96^{x}/96^{x}	334/193	109/109	107/100	95/94	92	85/92
106	Greece	93/76	97/88	411/175	104/101	106/106	91/92	99	89/80
107	Portugal	78/65	89/80	212/159	132/129	131/123	/		47/56
108	Czechoslovakia	/	/	577/281	93/93	95/96	/	93	27/49
109	Israel	93/83	97/93	470/264	99/97	94/97	/		79/87
110	USA	99/99	/	2119/811	/	101/100	97/97		98/99
111	Belgium	99/99	/	465/320	111/108	99/100	82/83	77	99/100
112	Germany Dem	/	/	663/754	111/113	107/105	92/91		79/76
113	Singapore	92/55	93/79	306/	121/113	118/113	100/100	95	70/73
114	New Zealand	/	/	923/369	110/106	107/106	100/100		84/86
115	Spain	93/87	97/92	295/368	106/116	113/113	98/98	96	97/107
116	Denmark	/	/	956/386	103/103	98/99	/	99	106/107
117	United Kingdom	/	/	1145/434	92/92	105/106	97/97		82/85
118	Italy	95/93	98/96	786/	112/109	/	97/98	99	/
119	Australia	/	/	1270/483	103/103	106/105	97/98		96/99
120	Germany Fed	/	/	954/385	/	101/101	/	95	96/92
121	Hong Kong	90^{x}/64^{x}	95/81	633/241	93/79	106/105	95/95	98	71/76
122	Austria	/	/	561/480	106/104	102/101	/	95	78/81
123	Norway	/	/	790/348	100/100	95/95	97/97	99	92/97
124	France	99/98	/	893/	144/143	114/113	100/100	95	89/96
125	Ireland	/	/	580/	107/112	100/100	/		91/101
126	Netherlands	/	/	908/469	105/104	114/116	85/88	94	105/103
127	Canada	/	/	953/577	108/105	106/104	97/97		104/104
128	Japan	99/99	/	863/587	103/102	102/102	100/100	99	95/97
129	Switzerland	/	/	834/405	118/118	/	/		/
130	Sweden	/	/	875/39	95/96	/	/		90/92
131	Finland	/	/	991/	100/95	102/101	/	98	98/114

Note: nations are listed in descending order of their 1988 under five mortality rates (see table 1)

TABLE 5: DEMOGRAPHIC INDICATORS

		Population under 16/under 5 (millions) 1988	Population annual growth rate (%)		Crude death rate		Crude birth rate		Life expectancy		Total fertility rate 1988	% population urbanized 1988	Average annual growth rate of urban population (%)	
			1965-80	1980-87	1960	1988	1960	1988	1960	1988			1965-80	1980-87
	Very high U5MR countries (over 170) Median	**233T/89T**	**2.5**	**2.7**	**28**	**18**	**48**	**49**	**37**	**48**	**6.5**	**24**	**6.0**	**5.8**
1	Afghanistan	6.7/2.6	2.4	-0.8	30	23	52	49	33	42	6.9	21	6.0	3.2
2	Mozambique	6.8/2.6	2.5	2.6	26	18	47	45	37	47	6.4	24	11.8	10.2
3	Mali	4.3/1.7	2.1	2.9	29	21	50	50	35	44	6.7	19	4.9	3.9
4	Angola	4.5/1.7	2.8	2.6	31	20	49	47	33	45	6.4	27	6.4	5.7
5	Sierra Leone	1.8/0.7	2.0	2.4	33	23	48	48	32	41	6.5	31	4.3	5.2
6	Malawi	3.8/1.5	2.9	3.2	28	20	53	53	38	47	7.0	14	7.8	7.7
7	Ethiopia	21.5/7.6	2.7	1.8	28	24	50	44	36	41	6.2	12	6.6	4.0
8	Guinea	3.0/1.2	1.9	2.4	33	22	48	47	33	42	6.2	24	6.6	5.5
9	Burkina Faso	3.9/1.5	2.0	2.5	29	18	52	47	36	47	6.5	9	3.4	5.1
10	Niger	3.3/1.3	2.7	2.9	31	21	46	51	35	45	7.1	18	6.9	7.0
11	Chad	2.4/0.9	2.0	2.3	30	19	46	44	35	46	5.9	31	9.2	7.4
12	Central African Rep	1.3/0.5	1.8	2.3	30	20	44	44	37	46	5.9	45	4.8	4.4
13	Somalia	3.5/1.4	2.7	3.5	28	20	49	51	36	45	6.6	35	6.1	5.9
14	Mauritania	0.9/0.3	2.3	2.6	28	19	48	46	35	46	6.5	39	12.4	7.4
15	Rwanda	3.5/1.4	3.3	3.4	22	17	50	51	42	49	8.3	7	6.3	7.9
16	Kampuchea	2.8/1.4	0.3	2.6	21	16	45	41	42	49	4.7	11	1.9	3.8
17	Yemen Dem	1.1/0.4	2.8	2.9	29	16	50	47	37	51	6.7	42	3.2	4.5
18	Nepal	8.1/3.0	2.4	2.6	26	15	46	39	38	51	5.9	9	5.1	7.2
19	Bhutan	0.6/0.2	1.6	1.9	25	17	43	38	38	48	5.5	5	3.7	5.1
20	Yemen	3.8/1.4	2.0	2.9	29	16	50	48	37	51	7.0	23	10.7	8.1
21	Burundi	2.4/0.7	1.9	2.8	25	17	44	46	42	49	6.3	7	1.8	8.9
22	Bangladesh	51.6/18.5	2.7	2.7	22	15	47	42	40	51	5.5	13	8.0	5.5
23	Benin	2.1/0.9	2.7	3.0	33	19	47	50	35	47	7.0	40	10.2	7.3
24	Madagascar	5.3/2.0	2.5	3.1	24	14	48	46	41	54	6.6	24	5.7	6.1
25	Sudan	11.3/4.3	3.0	3.0	25	16	47	44	39	50	6.4	22	5.1	4.1
26	Namibia	0.8/0.3		3.1	24	10	46	44	42	56	6.1	55		5.6
27	Tanzania	12.5/5.2	3.3	3.7	24	14	51	50	41	53	7.1	30	8.7	11.2
28	Nigeria	53.4/21.8	2.5	3.4	24	15	52	50	40	51	7.0	34	4.8	6.1
29	Bolivia	3.2/1.2	2.5	2.7	22	14	46	43	43	53	6.0	50	2.9	4.3
30	Haiti	2.6/0.9	2.0	1.8	23	13	43	34	42	55	4.7	29	4.0	4.0
	High U5MR countries (95–170) Median	**613T/220T**	**2.8**	**3.1**	**22**	**12**	**48**	**42**	**44**	**57**	**5.8**	**41**	**4.6**	**5.0**
31	Uganda	8.7/3.4	2.9	3.4	21	15	50	50	43	51	6.9	10	4.1	5.2
32	Gabon	0.4/0.1	3.5	3.8	24	16	31	39	41	52	5.0	44	4.2	6.4
33	Pakistan	54.3/22.3	3.1	3.7	23	12	49	47	43	57	6.4	31	4.3	5.0
34	Laos	1.7/0.7	1.4	2.1	23	16	45	41	40	49	5.7	18	4.8	5.7
35	Togo	1.5/0.6	3.0	3.0	26	14	48	45	39	53	6.1	24	7.2	6.3
36	Cameroon	4.9/1.8	2.7	2.7	24	15	44	41	40	51	5.7	47	8.1	6.5
37	India	319.3/112.4	2.3	2.2	21	11	43	32	44	58	4.3	27	3.6	4.0
38	Liberia	1.1/0.4	3.0	3.2	23	13	46	45	41	55	6.5	43	6.2	5.7
39	Ghana	6.7/2.6	2.2	3.4	19	13	48	44	45	54	6.4	33	3.4	4.2
40	Côte d'Ivoire	6.0/2.4	4.2	4.2	25	14	53	51	39	53	7.4	45	8.7	6.6
41	Zaire	16.3/6.3	2.8	3.1	22	14	47	46	42	53	6.1	39	7.2	4.6
42	Senegal	3.2/1.3	2.5	2.6	27	19	48	46	37	46	6.4	38	4.1	3.6
43	Lesotho	0.8/0.3	2.3	2.8	24	12	43	41	42	56	5.8	19	14.6	7.0
44	Zambia	4.0/1.6	3.1	3.9	22	14	50	51	42	54	7.2	54	7.1	6.7
45	Egypt	22.1/8.1	2.4	2.7	21	10	45	36	46	61	4.8	48	2.9	3.6
46	Peru	8.9/3.2	2.8	2.6	19	9	47	34	48	62	4.4	69	4.1	3.5
47	Morocco	10.4/3.7	2.5	2.6	21	10	50	35	47	61	4.8	47	4.2	4.3
48	Libyan Arab Jamahiriya	2.0/0.8	4.6	4.1	19	9	49	44	47	61	6.8	68	9.7	6.5
49	Indonesia	67.9/21.4	2.3	1.8	23	11	44	27	41	56	3.2	27	4.7	4.5
50	Congo	0.9/0.3	2.7	2.6	23	17	45	44	38	49	6.0	41	3.5	3.9
51	Zimbabwe	4.4/1.6	3.1	3.1	20	10	53	42	45	59	5.8	27	7.5	5.5
52	Kenya	12.5/5.1	3.6	4.1	22	12	53	54	45	59	8.1	22	9.0	8.2
53	Honduras	2.3/0.8	3.2	3.5	19	8	51	40	46	64	5.5	42	5.5	5.5
54	Algeria	11.3/4.1	3.1	3.1	20	9	51	40	47	63	6.0	44	3.8	3.9
55	Guatemala	4.2/1.5	2.8	2.8	19	9	49	41	46	62	5.7	41	3.6	3.7
56	Saudi Arabia	6.2/2.4	4.6	4.2	23	7	49	42	44	64	7.2	76	8.5	5.8
57	South Africa	13.3/4.7	2.4	2.2	17	10	42	32	49	61	4.4	58	2.6	3.3
58	Nicaragua	1.8/0.7	3.1	3.3	18	8	51	42	47	64	5.5	59	4.6	4.5
59	Myanmar	16.1/5.5	2.3	2.1	21	10	42	30	44	60	4.0	24	2.8	2.3
	Middle U5MR countries (31–94) Median	**706T/232T**	**2.6**	**2.3**	**15**	**7**	**44**	**29**	**53**	**66**	**3.6**	**53**	**4.5**	**3.7**
60	Iraq	8.7/3.2	3.4	3.5	20	8	49	42	48	64	6.3	73	5.3	4.8
61	Turkey	19.9/6.8	2.4	2.3	18	8	45	28	50	64	3.5	47	4.3	3.3
62	Botswana	0.6/0.2	3.5	3.6	20	11	52	47	46	59	6.2	22	15.4	8.2
63	Iran, Islamic Rep. of	24.2/9.5	3.2	3.9	21	8	47	42	50	66	5.6	54	5.5	5.0
64	Viet Nam	27.0/9.2		2.2	23	9	41	32	44	62	4.0	21	4.1	3.5
65	Ecuador	4.4/1.6	3.1	2.8	15	7	46	35	53	66	4.6	55	5.1	4.8
66	Brazil	54.6/18.7	2.4	2.2	13	8	43	28	55	65	3.4	75	4.5	3.6
67	El Salvador	2.4/0.8	2.7	1.3	16	8	48	36	50	63	4.8	44	3.5	2.0
68	Tunisia	3.2/1.1	2.1	2.5	19	7	47	30	48	66	4.0	54	4.2	2.9
69	Papua New Guinea	1.7/0.6	2.3	2.6	23	12	44	39	41	54	5.7	15	8.4	4.6
70	Dominican Rep	2.8/1.0	2.7	2.3	16	7	50	31	52	66	3.7	59	5.3	4.2
71	Philippines	25.4/9.0	2.9	2.6	15	8	45	33	53	64	4.3	41	4.0	3.9
72	Guyana	0.4/0.1		1.9	10	5	42	24	60	70	2.7	34		3.1
73	Mexico	34.9/11.4	3.1	2.3	12	6	46	29	57	69	3.5	72	4.5	3.3
74	Colombia	11.8/4.1	2.2	2.1	13	7	45	29	55	65	3.5	69	3.5	3.1
75	Syria	5.9/2.2	3.4	3.5	18	7	47	44	50	65	6.7	51	4.5	4.4
76	Oman	0.7/0.3	3.6	4.2	28	13	51	46	40	56	7.2	10	8.1	8.0
77	Paraguay	1.7/0.6	2.8	3.1	9	7	43	35	64	67	4.6	46	3.2	4.5
78	Mongolia	0.9/0.3	3.0	2.9	15	8	41	39	52	64	5.4	51	4.5	2.9
79	Jordan	2.0/0.8	2.6	3.7	23	6	50	46	47	66	7.2	67	5.3	5.1
80	Lebanon	1.1/0.4	1.6	0.7	14	8	43	29	60	67	3.3	83	4.6	1.9
81	Thailand	19.7/6.0	2.7	1.8	15	7	44	22	52	65	2.5	22	4.6	4.6
82	Venezuela	7.7/2.7	3.5	2.8	10	5	45	30	60	70	3.7	89	4.5	3.7
83	Sri Lanka	5.9/1.9	1.8	1.6	9	6	36	22	62	70	2.6	21	2.3	1.4
84	China	324.9/102.0	2.2	1.3	19	7	37	21	47	70	2.4	21	2.6	1.7
85	Argentina	10.1/3.2	1.6	1.4	9	9	24	21	65	71	2.9	86	2.2	1.8
86	Panama	0.9/0.3	2.6	2.1	10	5	41	27	61	72	3.1	54	3.4	3.0
87	Albania	1.1/0.4	2.5	2.0	10	6	41	24	62	72	3.0	35	3.4	2.5
88	Korea, Dem	8.7/3.0	2.7	2.4	13	5	41	29	54	69	3.6	66	4.6	3.7
89	Korea, Rep	8.7/3.0	1.9	1.4	14	6	43	19	54	69	2.0	69	5.7	3.9
90	United Arab Emirates	0.5/0.2	16.1	4.9	19	4	46	22	53	71	4.8	77	18.9	4.3
91	Malaysia	6.4/2.3	2.5	2.3	15	6	44	29	54	70	3.5	41	4.5	4.5
92	USSR	76.4/25.2	0.9	0.8	7	11	24	18	68	70	2.4	67	2.2	1.5
93	Uruguay	0.9/0.3	0.4	0.7	10	10	22	19	68	71	2.6	85	0.7	0.9
	Low U5MR countries (30 and under) Median	**212T/65T**	**0.9**	**0.5**	**9**	**10**	**21**	**14**	**69**	**75**	**1.7**	**74**	**2.1**	**1.2**
94	Mauritius	0.3/0.1	1.6	1.5	10	5	44	18	59	69	1.9	42	4.0	1.3
95	Yugoslavia	5.9/1.8	0.9	0.7	10	9	23	15	63	72	1.9	49	3.0	2.4
96	Romania	5.9/1.7	1.1	0.5	9	11	20	15	65	70	2.1	50	3.4	0.9
97	Chile	4.2/1.4	1.8	1.7	13	6	37	24	57	72	2.7	85	2.6	2.3
98	Trinidad and Tobago	0.4/0.1	1.3	1.6	9	6	38	24	64	70	2.7	67	5.0	3.6
99	Kuwait	0.8/0.3	7.0	4.3	10	3	44	32	60	73	4.8	95	8.2	4.9
100	Jamaica	0.9/0.3	1.5	1.5	9	6	39	26	63	74	2.8	51	3.4	2.6
101	Costa Rica	1.1/0.4	2.6	2.8	10	4	47	28	62	75	3.2	52	3.7	4.4
102	Bulgaria	2.0/0.6	0.5	0.2	9	12	18	13	68	72	1.9	69	2.8	1.4
103	Hungary	2.3/0.6	0.4	-0.1	10	13	16	12	68	70	1.7	59	1.8	1.1
104	Poland	10.3/3.2	0.8	0.8	8	10	24	16	67	71	2.2	62	1.8	1.7
105	Cuba	2.5/0.8	1.5	0.5	9	7	32	16	63	74	1.7	74	2.7	1.5
106	Greece	2.2/0.6	0.7	0.5	8	10	19	12	69	76	1.7	62	2.5	1.3
107	Portugal	2.4/0.7	0.6	0.6	11	10	24	13	63	73	1.7	32	2.0	1.8
108	Czechoslovakia	4.0/1.1	0.5	0.2	10	12	17	14	70	71	2.0	67	1.9	1.2
109	Israel	1.5/0.5	2.8	1.7	6	7	27	21	69	75	2.9	91	3.5	2.0
110	USA	56.3/18.3	1.0	0.9	9	9	23	15	70	75	1.8	74	1.2	1.0
111	Belgium	2.0/0.6	0.3	0.1	12	12	17	12	70	75	1.5	97	0.5	0.3
112	Germany, Dem	3.5/1.1	-0.2	-0.1	13	13	17	13	70	73	1.7	78	0.1	0.2
113	Singapore	0.7/0.2	1.6	1.1	8	6	38	16	64	73	1.6	100	1.6	1.1
114	New Zealand	0.8/0.3	1.3	0.8	9	8	26	16	71	75	1.9	84	1.5	0.9
115	Spain	9.0/2.5	1.0	0.5	9	9	21	13	69	77	1.7	77	2.4	1.3
116	Denmark	1.0/0.3	0.5		9	11	17	11	72	75	1.5	86	1.1	0.3
117	United Kingdom	11.5/3.7	0.2	0.1	12	12	17	13	71	75	1.8	92	0.5	0.3
118	Italy	11.2/3.0	0.6	0.2	10	10	18	11	69	76	1.4	68	1.0	0.5
119	Australia	4.0/1.2	1.8	1.3	9	7	22	15	71	76	1.8	85	0.2	1.3
120	Germany, Fed	9.8/3.1	0.3	-0.2	11	12	17	11	69	75	1.4	86	0.8	0.1
121	Hong Kong	1.4/0.4	2.1	1.5	7	6	35	16	66	76	1.7	93	2.3	1.7
122	Austria	1.4/0.4	0.3	-0.1	12	12	18	12	69	74	1.5	57	0.1	0.5
123	Norway	0.9/0.3	0.6	0.3	9	11	18	12	73	77	1.7	74	5.0	0.9
124	France	12.3/3.8	0.7	0.4	12	10	18	14	70	76	1.8	74	2.7	0.5
125	Ireland	1.1/0.3	1.2	0.9	12	9	21	18	70	74	2.5	58	2.2	1.5
126	Netherlands	2.9/0.9	0.9	0.4	8	9	21	12	73	77	1.4	88	1.5	0.4
127	Canada	5.9/1.9	1.3	1.1	8	7	26	14	71	77	1.6	76	1.5	1.2
128	Japan	26.0/7.0	1.2	0.6	8	7	18	11	68	78	1.7	77	2.1	0.7
129	Switzerland	1.2/0.4	0.5	0.4	10	10	18	12	71	77	1.6	59	1.2	0.8
130	Sweden	1.5/0.4	0.5	0.1	10	12	15	11	73	77	1.6	84	1.0	0.2
131	Finland	1.0/0.3	0.3	0.4	9	10	19	12	68	75	1.6	66	2.5	1.8

Note: nations are listed in descending order of their 1988 under five mortality rates (see table 1)

TABLE 6: ECONOMIC INDICATORS

		GNP per capita (US $) 1987	GNP per capita average annual growth rate (%)		Rate of inflation (%) 1980-1987	% of population below absolute poverty level 1977-87	% of central gov't expenditure allocated to health/education/defense 1986/87	ODA inflow in millions US $ (1987)/ as a % of recipient GNP (1987)	Debt serv as a % exports goods and s
			1965-80	1980-87		urban/rural			1970
	Very high U5MR countries (over 170) Median	**275**	**1.5**	**-1.7**	**10**	**45/65**	**6/12/9**	**283/15**	**4**
1	Afghanistan		0.6			18/36	/ /	/	
2	Mozambique	170		-8.2	27	/	/ /	649/41	
3	Mali	210	2.1*	0.5	4	27*/48*	2/ 9/8	364/19	1
4	Angola	470*				/	/ /	/	
5	Sierra Leone	300	0.7	-2.0	50	/65	6/13/3	68/7	11
6	Malawi	160	3.2	0.0	12	25/85	7/11/7	280/23	8
7	Ethiopia	130	0.4	-1.6	3	60/65	/ /	635/12	11
8	Guinea		1.3			/	/ /	/	
9	Burkina Faso	190	1.7	2.5	4	/	6/19/17	283/16	7
10	Niger	260	-2.5	-4.9	4	/35	/ /	348/16	4
11	Chad	150	-1.9	0.0	5	30*/56*	/ /	198/20	4
12	Central African Rep	330	0.8	-0.7	8	/91	/ /	173/16	5
13	Somalia	290	-0.1	-2.5	38	40/70	7/ /	580/57	2
14	Mauritania	440	-0.1	-1.6	10	/	/ /	178/19	3
15	Rwanda	300	1.6	-1.0	5	30/90	/ /	243/12	1
16	Kampuchea					/	/ /	/	
17	Yemen Dem	420		-6.1	5	/20	6/ /	80/8	38
18	Nepal	160	0.0		9	55/61	5/12/6	345/13	3
19	Bhutan	150		0.0		/	42/17/	/	
20	Yemen	590	6.5*	2.0	11	/	4/17/22	349/8	25
21	Burundi	250	2.4	-0.1	8	55/85	6/16/18	192/15	2
22	Bangladesh	160	-0.3	0.8	11	86/86	10/11/10	1637/9	24
23	Benin	310	-0.3	-0.8	8	/65	6/18/	136/8	2
24	Madagascar	210	-0.4	-3.7	17	50/50	/ /	327/16	4
25	Sudan	330	0.8	-4.3	32	/85*	/ /	902/11	11
26	Tanzania	180	0.8	-1.7	5	/	6/ 8/16	882/25	5
27	Namibia					/	/ /	/	
28	Nigeria	370	4.2	-4.7	10	/	1/ 3/3	69/	4
29	Bolivia	580	1.7	-4.9	602	/85*	1/12/6	318/7	11
30	Haiti	360	0.9	-2.1	8	70*/80*	/ /	218/10	59
	High U5MR countries (95-170) Median	**580**	**1.8**	**-1.3**	**9**	**29/42**	**4/15/10**	**258/6**	**6**
31	Uganda	260	-2.2	-2.4	95	/	2/15/26	276/7	3
32	Gabon	2700	5.6	-3.5	3	/	/ /	82/2	6
33	Pakistan	350	1.8	3.3	7	32/29	1/ 3/30	858/2	24
34	Laos	170			47	/	/ /	59/8	
35	Togo	290	1.7	-3.4	7	42/	4/13/8	123/10	3
36	Cameroon	970	2.4	4.5	8	15/40	4/13/8	213/2	3
37	India	300	1.5	3.2	8	40/51	2/ 3/22	1852/1	22
38	Liberia	450	0.5	-5.2	2	/23	7/16/9	78/7	8
39	Ghana	390	-0.8	-2.0	48	59*/37*	8/24/7	373/7	6
40	Côte d'Ivoire	740	2.8	-3.0	4	30*/26*	4/21/4	254/3	7
41	Zaire	150	-1.3	-2.5	54	/80	/ /	621/11	4
42	Senegal	520	-0.5	0.1	9	/	/ /	642/14	3
43	Lesotho	370	6.8	-0.9	12	50/55	7/16/10	108/29	5
44	Zambia	250	-1.2	-5.6	29	25/	5/ 8/	429/21	6
45	Egypt	680	2.8	2.9	9	21/25	3/12/20	1766/5	38
46	Peru	1470	0.8	-1.0	102	49/	4/ /	292/1	12
47	Morocco	610	2.7	0.3	7	28/45	3/17/15	401/2	9
48	Libyan Arab Jamahiriya	5460	0.0	-10.5		/	/ /	6/	
49	Indonesia	450	5.2	1.7	9	26/44	2/ 9/9	1245/2	7
50	Congo	870	2.7	1.7	2	/	/ /	152/7	12
51	Zimbabwe	580	1.7	-1.3	12	/	6/20/14	295/5	2
52	Kenya	330	3.1	-0.9	10	10/55	7/23/9	565/7	6
53	Honduras	810	1.1	-2.0	5	14/55	/ /	258/6	3
54	Algeria	2680	4.2	0.6	6	20/	6/25/9	222/	4
55	Guatemala	950	3.0	-3.6	13	66/74	/ /	241/3	7
56	Saudi Arabia	6200	4.0*	-11.8	-3	/	/ /	22/	
57	South Africa	1890	3.2	-1.3	14	/	/ /	/	
58	Nicaragua	830	-0.7	-4.7	87	21/19	/ /	141/4	11
59	Myanmar	200*	1.6		3	40/40	8/12/19	/	12

Note: nations are listed in descending order of their 1988 under five mortality rates (see table 1)

		GNP per capita (US $) 1987	GNP per capita average annual growth rate (%) 1965-80	1980-87	Rate of inflation (%) 1980-1987	% of population below absolute poverty level 1977-87 urban/rural	% of central gov't expenditure allocated to health/education/defense 1986/87	ODA inflow in millions US $ (1987)/as a % of recipient GNP (1987)	Debt service as a % of exports of goods and services 1970	1987
	Middle U5MR countries (31–94) Median	**1400**	**4.0**	**−0.3**	**13**	**20/33**	**6/14/11**	**180/3**	**10**	**22**
60	Iraq	3020x			30	../..	5/../..	../..		
61	Turkey	1210	3.6	3.0	37	../..	2/13/11	417/1	22	32
62	Botswana	1050	9.9	8.0	8	40/55	6/18/8	154/10	1	4
63	Iran, Islamic Rep. of		2.9			../..	6/20/14	../..		
64	Viet Nam					6/..	../../..	../..		
65	Ecuador	1040	5.4	−2.0	30	40/65	7/25/12	203/2	9	21
66	Brazil	2020	6.3	1.0	166	../..	6/3/3	288/..	13	27
67	El Salvador	860	1.5	−2.0	17	20/32	7/17/27	426/9	4	19
68	Tunisia	1180	4.7	0.7	8	20/15	7/14/8	282/3	20	27
69	Papua New Guinea	700		0.1	4	10/75	10/16/5	322/11	1	13
70	Dominican Rep	730	3.8	−1.5	16	45/43	9/13/8	130/3	4	
71	Philippines	590	3.2	−3.3	17	50*/64*	6/18/9	775/2	8	23
72	Guyana	390	0.7x	−6.7	14	../..	2/3/..	../..		
73	Mexico	1830	3.6	−1.6	69	../..	1/9/1	156/..	24	30
74	Colombia	1240	3.7	0.9	24	32*/70*	../../..	78/..	12	33
75	Syria	1640	5.1	−3.2	11	../..	1/9/39	697/3	11	17
76	Oman	5810	9.0	8.6	−7	../..	5/11/44	16/..		
77	Paraguay	990	4.1	−2.1	21	19/50	3/12/12	82/2	12	21
78	Mongolia					../..	../../..	../..		
79	Jordan	1560	5.8x	−0.7	3	14/17	4/14/30	595/12	4	22
80	Lebanon					../..	../../..	100/..		
81	Thailand	850	4.4	3.4	3	15/34	6/19/19	506/1	3	14
82	Venezuela	3230	2.3	−3.1	11	../..	10/20/6	19/..	3	23
83	Sri Lanka	400	2.8	3.0	12	../..	5/8/10	502/8	11	19
84	China	290	4.1	9.1	4	../10*	../../..	1449/1	7	
85	Argentina	2390	1.7	−1.8	299	../..	2/6/6	99/..	22	45
86	Panama	2240	2.8	0.3	3	21/30	16/16/..	40/1	8	7
87	Albania					../..	../../..	../..		
88	Korea Dem					../..	../../..	../..		
89	Korea Rep	2690	7.3	7.3	5	18/11	2/18/27	11/..	20	22
90	United Arab Emirates	15830		−9.3		../..	6/10/45	115/1		
91	Malaysia	1810	4.7	1.1	1	13/38	../../..	363/1	4	14
92	USSR	4550x				../..	../../..	../..		
93	Uruguay	2190	2.5	−2.3	55	22*/..	5/7/10	18/..	22	24
	Low U5MR countries (30 and under) Median	**7940**	**3.3**	**1.6**	**7**	**../..**	**10/9/6**	**35/..**	**7**	**18**
94	Mauritius	1490	3.7	4.4	8	12/12	8/12/1	65/4	3	6
95	Yugoslavia	2480	5.2	0.0	57	../..	../../55	35/..	10	13
96	Romania	2560x				../..	1/2/5	../..		
97	Chile	1310	0.0	−1.1	21	../..	6/13/11	21/..	19	21
98	Trinidad and Tobago	4210	3.1	−6.5	6	../39	../../..	34/1	5	
99	Kuwait	14610	0.6x	−3.2	−5	../..	8/14/14	3/..		
100	Jamaica	940	−0.1	−2.5	19	../80	7/../..	169/6	3	27
101	Costa Rica	1610	3.3	−0.5	29	../..	19/16/2	228/5	10	12
102	Bulgaria	4150x				../..	../../..	../..		
103	Hungary	2240	5.1	1.8	6	../..	4/2/4	../..	27	
104	Poland	2070x			31	../..	../../..	../..		
105	Cuba					../..	../../..	../..		
106	Greece	4020	4.8	0.0	20	../..	../../..	34/..	9	34
107	Portugal	2830	4.6	1.4	21	../..	../../..	65/..	7	38
108	Czechoslovakia	5820x				../..	../../..	../..		
109	Israel	6800	3.7	1.5	159	../..	3/8/30	1251/4	3	18
110	USA	18530	1.8	2.0	4	../..	12/2/26	../..		
111	Belgium	11480	3.6	1.3	5	../..	2/13/5	../..		
112	Germany Dem	7180x				../..	../../..	../..		
113	Singapore	7940	8.3	5.7	1	../..	4/18/19	23/..	1	1
114	New Zealand	7750	1.7	1.3	12	../..	12/11/5	../..		
115	Spain	6010	4.1	1.6	11	../..	13/6/6	../..		
116	Denmark	14930	2.2	2.5	7	../..	1/9/5	../..		
117	United Kingdom	10420	2.0	2.6	6	../..	13/2/13	../..		
118	Italy	10350	3.2	1.8	12	../..	10/7/3	../..		
119	Australia	11100	2.2	1.4	8	../..	10/7/9	../..		
120	Germany Fed	14400	3.0	1.8	3	../..	18/1/9	../..		
121	Hong Kong	8070	6.2	5.3	7	../..	../../..	19/..		
122	Austria	11980	4.0	1.6	4	../..	13/10/3	../..		
123	Norway	17190	3.6	3.7	6	../..	11/9/8	../..		
124	France	12790	3.7	0.9	8	../..	21/8/6	../..		
125	Ireland	6120	2.8		10	../..	13/11/3	../..		
126	Netherlands	11860	2.7		2	../..	11/12/5	../..		
127	Canada	15160	3.3	2.1	5	../..	6/4/8	../..		
128	Japan	15760	5.1	3.2	1	../..	../../..	../..		
129	Switzerland	21330	1.5	1.6	4	../..	13/3/10	../..		
130	Sweden	15550	2.0	1.9	8	../..	1/9/7	../..		
131	Finland	14470	3.6	2.5	7	../..	11/14/5	../..		

TABLE 7: WOMEN

		Life expectancy females as a percentage of males 1987	Adult literacy rate females as a percentage of males 1985	Enrolment ratios females as a percentage of males 1986-88		Contraceptive prevalence (%) 1980-87	Pregnant women immunized against Tetanus (%) 1987-88	% of births attended by trained health personnel 1983-88	Maternal mortality rate 1980-87
				Primary school	Secondary school				
	Very high U5MR countries (over 170) Median	**107.0**	**50**	**65**	**48**	**5**	**20**	**25**	**600**
1	Afghanistan	102.4	21	52	50		6	8	690[x]
2	Mozambique	107.2	40	78	57	4[x]	43	28	
3	Mali	107.5	48	59	44	5	17	27	
4	Angola	107.3	67			1	19	15	
5	Sierra Leone	108.0	55	71	48		50	25	450
6	Malawi	103.1	60	81	60	7	63	45	100[x]
7	Ethiopia	108.0		61	67	2	7	14	
8	Guinea	107.8	43	44	31	1[x]	6	25	
9	Burkina Faso	107.2	29	59	50	1	15	30	810
10	Niger	107.5	47	54		1[x]	8	47	420
11	Chad	107.2	28	40	20	1	10	24[x]	860[x]
12	Central Afr.	107.2	55	62	35		20	66	600
13	Somalia	107.3	33[x]				26	2	1100
14	Mauritania	107.3		69	39	1		20	
15	Rwanda	107.0	54	96	71	10	43	22	210[x]
16	Kampuchea	106.1	77[x]		44		3	47[x]	
17	Yemen Dem.	106.0	42	37	42		5	10	
18	Nepal	97.6	31	45	31	14	31	6	830
19	Bhutan	96.9		65	29		42	7	1710
20	Yemen	105.8	17[x]	28	13	1[x]	3	12	
21	Burundi	107.0	61[x]	74	50	9	69	21	
22	Bangladesh	98.6	51	84	46	22	11	5	600
23	Benin	107.2	43	51	39	9	7	45	
24	Madagascar	105.7	84	95	83		6	62	240
25	Sudan	104.9	42[x]	70	74	5[x]	20[x]	20	660
26	Tanzania	106.6	95[y]	99	60	1	54	60	340[x]
27	Namibia	104.5							
28	Nigeria	107.0	57			5	20	40[x]	800
29	Bolivia	108.9	77	88	88	26	25	36[x]	480
30	Haiti	106.3	88	87	90	7	56	40	230
	High U5MR countries (95–170) Median	**106.5**	**64**	**83**	**67**	**12**	**26**	**41**	**300**
31	Uganda	106.7	64	83	56	1	14	45	300
32	Gabon	106.6	76				60	92[x]	
33	Pakistan	100.0	48	55	42	8	26	24[x]	500
34	Laos	106.3	83	83	70		7		
35	Togo	106.9	53	63	33		72	15	
36	Cameroon	108.1	66	84	63	2[x]	26		300[x]
37	India	100.3	51	72	54	34	58	33	340
38	Liberia	105.6	49	61		6	20	87	
39	Ghana	106.8	67	81	65	10[x]	19	40	1000
40	Côte d'Ivoire	106.7	59		46	3	46	20	
41	Zaire	106.6	57	81	44	1	43		
42	Senegal	107.3	51	69	53	12	24	50[x]	600
43	Lesotho	117.4	136	125	144	5[x]		40	
44	Zambia	104.0	80	90		1	45		151
45	Egypt	104.5	51	79	73	30	88	47	318
46	Peru	106.5	86	96	90	46	8	44	88
47	Morocco	105.7	49	66	70	36	33	29[x]	300[x]
48	Libyan Arab Jamahiriya	105.7	62				12[x]	76[x]	80[x]
49	Indonesia	105.1	78	96		48	33	31	450
50	Congo	107.0	78				47		1000[x]
51	Zimbabwe	106.4	83	97	86	38	22	69	480[x]
52	Kenya	107.0	70	95	70	17	62	28	170[x]
53	Honduras	106.7	95	104		35	16	50	50
54	Algeria	105.2	59	83	75	7		15	140[x]
55	Guatemala	107.9	75	85		23	18	34	110
56	Saudi Arabia	105.6	44[x]	83	67		50	74	
57	South Africa	110.3				48			83[x]
58	Nicaragua	104.3		111	200	27	25	41	47
59	Mynamar	105.9				5	24	57	135

Note: nations are listed in descending order of their 1988 under five mortality rates (see table 1)

		Life expectancy females as a percentage of males 1987	Adult literacy rate females as a percentage of males 1985	Enrolment ratios females as a percentage of males 1986-88		Contraceptive prevalence (%) 1980-87	Pregnant women immunized against Tetanus (%) 1987-88	% of births attended by trained health personnel 1983-88	Maternal mortality rate 1980-87
				Primary school	Secondary school				
	Middle U5MR countries (31–94) Median	**106.6**	**93**	**98**	**99**	**49**	**40**	**78**	**78**
60	Iraq	102.9	97	87	63	..	56	50[*]	
61	Turkey	105.2	72[x]	93	60	51	7	78[*]	210
62	Botswana	110.8	95	105	107	28	61	77	250
63	Iran, Islamic Rep. of	100.3	63	86	68	23	50	82[*]	
64	Viet Nam	107.4	91[*]	88	93	20	..	99[x]	140
65	Ecuador	106.6	94	98	104	44	5	27	190
66	Brazil	108.5	96		128	66		95	120
67	El Salvador	113.7	92	105	111	70	19	35	70
68	Tunisia	102.5	60	85	74	41	34	68	310[x]
69	Papua New Guinea	103.1	64	85	56	4	17	34	900
70	Dominican Rep.	106.6	99	104	..	50	87	57[*]	74
71	Philippines	106.1	99	102	100	45	37	57	93
72	Guyana	107.4	98	..	..	31[x]	57	96	..
73	Mexico	110.0	96	98	98	53		94	82
74	Colombia	107.3	100[*]	103	102	65	40	51	110
75	Syria	105.9	57	90	70	20[x]	40	37[x]	280
76	Oman	104.9	26[*]	89	63		70	60	
77	Paraguay	106.6	93	95	100	45	64	22	380
78	Mongolia	106.7	95	103	109			99	100
79	Jordan	105.7	72	101	98	26	54	83	
80	Lebanon	106.0	80	91	98				
81	Thailand	106.4	94		..	66	61	40[*]	
82	Venezuela	109.2	97	100	123	49[x]		82[x]	59
83	Sri Lanka	106.2	91	97	110	62	38	87	60
84	China	104.4	68	89	74	74			44
85	Argentina	110.0	99	100	113	74			69
86	Panama	105.7	99	95	113	58	27	89	57
87	Albania	107.3		99	89				
88	Korea Dem.	109.8						65	41
89	Korea Rep.	109.4	92[x]	100	95	70		70[x]	26
90	United Arab Emirates	106.3		102	120			96	
91	Malaysia	106.0	82	100	100	51	53	82	59
92	USSR	113.9						98	48
93	Uruguay	109.9		98			13	97	38
	Low U5MR countries (30 and under) Median	**108.4**	**93**	**100**	**103**	**71**	**. .**	**99**	**10**
94	Mauritius	108.2	87	102	94	75	65	85	100
95	Yugoslavia	108.5	89	99	96	55[x]		86[x]	22
96	Romania	108.1			101	58[x]		100[x]	150
97	Chile	110.3	99[*]	98	106	43		98	47
98	Trinidad and Tobago	107.4	98	101	106	53	60	98	54
99	Kuwait	106.0	83	97	92	.	2	99	6
100	Jamaica	107.5		102	108	52	50	89	110
101	Costa Rica	106.4	99	97	108	70	90	93[x]	36
102	Bulgaria	108.3		98	101	76[x]		100	13
103	Hungary	111.3		100	101	73		99[x]	26
104	Poland	111.8		100	105	75[x]		100[x]	11
105	Cuba	105.0	100[x]	94	108	60			34
106	Greece	106.0	91	100	90			97[x]	9
107	Portugal	109.7	90	94	119	66		87[x]	12
108	Czechoslovakia	111.0		101	182	95[x]	. .	100	10
109	Israel	104.9	96	103	110			100[x]	5
110	USA	109.8		99	101	68		99	8
111	Belgium	109.2		101	101	81[x]		100	9
112	Germany Dem.	108.1		98	96			99[x]	16
113	Singapore	108.0	85	96	104	74	90	100	5
114	New Zealand	108.5		99	102	70[x]		99	6
115	Spain	108.3	95	100	110	59		96	11
116	Denmark	107.8		101	101	63[x]		100[x]	4
117	United Kingdom	107.9		101	104	83		100[x]	9
118	Italy	109.3	98			78[x]		100[x]	10
119	Australia	109.1		99	103	71		99[x]	8
120	Germany Fed.	109.1		100	96	78		100[x]	11
121	Hong Kong	107.7	85	99	107	72	90	92	5
122	Austria	110.2		99	104	71[x]			7
123	Norway	109.1		100	105	71[x]		100[x]	2
124	France	111.3		99	108	79[x]		99[x]	14
125	Ireland	107.6		100	111	. .			12
126	Netherlands	109.1		102	98	76[x]		100[x]	5
127	Canada	109.4		98	100	73		99	3
128	Japan	107.6		100	102	64	. .	100	16
129	Switzerland	108.9		. .	. .	71[x]		99[x]	5
130	Sweden	108.0			102	78	. .	100[x]	5
131	Finland	110.9		99	116	80[x]		100[x]	6

TABLE 8: BASIC INDICATORS ON LESS POPULOUS COUNTRIES

		Under 5 mortality rate		Infant mortality rate (under 1)		Total population (millions)	Annual no. of births/infant and child deaths (0–4) (thousands)	GNP per capita US $	Life expectancy at birth (years)	Adult literacy rate % male/female	% of age group enrolled in primary school male/female
		1960	1988	1960	1988	1988	1988	1987	1988	1985	1986-88
1	Gambia	375	245	213	142	0.8	38/9	220	43	36/15	76/47
2	Guinea-Bissau	315	223	188	131	0.9	39/9	160	45	46/17	73/39
3	Equatorial Guinea	315	214	188	126	0.4	18/4	180^{x}	47	../..	../..
4	Djibouti		169^{x}	186	121	0.4	18/3	480^{x}	47	15^{x}/9^{x}	../..
5	Swaziland	227	174	152	117	0.7	35/6	700	56	70/66	105/103
6	Vanuatu			..	101^{y}	0.2	../..	..	..	57^{x}/48^{x}	../..
7	Comoros	216	129	128	79	0.5	22/3	370	52	56^{x}/40^{x}	90/70
8	Maldives		91^{y}	..	68^{y}	0.2	../..	300	..	95^{y}/90^{y}	../..
9	Sao Tome & Principe		91^{y}		66^{y}	0.1	../..	280	..	73^{x}/42^{x}	../..
10	Cape Verde	213	91	143	65	0.4	14/1	500	61	61/39	112/105
11	Solomon Islands				44^{y}	0.3	../..	420	..	../..	../..
12	St Christopher-Nevis				40^{y}	(.)	../..	1700	..	../..	../..
13	Dominica				40^{y}	0.1	../..	1440	..	../..	../..
14	Samoa				33^{y}	0.2	../..	550	..	../..	../..
15	Saint Vincent				33^{y}	0.1	../..	1000	..	../..	../..
16	Qatar	239	39	145	30	0.3	10/(.)	12510	69	51^{x}/51^{x}	122/119
17	Suriname	96	39	70	30	0.4	10/(.)	2270	70	90/90	129/121
18	Fiji	98	32	71	27	0.7	19/1	1570	71	90/81	129/129
19	Belize		32^{y}		25^{y}	0.1	../..	1240	71^{y}	93^{x}/93^{x}	104^{x}/102^{x}
20	Bahrain	208	31	130	25	0.5	13/(.)	8510^{x}	71	79/64	111/108
21	Bahamas				23	0.3	../..	10280	..	../..	../..
22	Antigua		26^{x}	26	21^{x}	0.1	../..	2540	..	../..	../..
23	Saint Lucia				20^{y}	0.1	../..	1400	..	../..	../..
24	Seychelles		21^{y}		17^{y}	0.1	../..	3120	..	../..	103^{y}/102^{y}
25	Grenada				14^{y}	0.1	../..	1340	..	../..	../..
26	Brunei Darussalam				12	0.2	../..	15390		../..	../..
27	Barbados	66	15	54	11	0.3	5/(.)	5350	74	../..	113^{x}/108^{x}
28	Cyprus	36	13	30	12	0.7	13/(.)	5200	76	../..	106/106
29	Luxembourg	41	13	33	9	0.4	4/(.)	18550	74	../..	../..
30	Malta	42	9	37	7	0.3	5/(.)	4190	73	../..	109/105
31	Iceland	22	9	17	7	0.2	4/(.)	16330	78	../..	98/100

Note: nations are listed in descending order of their 1988 infant mortality rate where no under five mortality rate is available.

Measuring human development

An introduction to Table 9.

If development in the 1990s is to assume a more human face then there arises a corresponding need for a means of measuring human as well as economic progress. From UNICEF's point of view, in particular, there is a need for an agreed method of measuring the level of child well-being and its rate of change.

The under five mortality rates (U5MR) is used in Table 9 (next page) as the principle indicator of such progress.

U5MR has several advantages. First, it measures an end result of the development process rather than an 'input' such as school enrolment level, per capita calorie availability or the number of doctors' per thousand population – all of which are means to an end.

Second, the U5MR is known to be the result of a wide variety of inputs: the nutritional health and the health knowledge of mothers; the level of immunization and ORT use; the availability of maternal and child health services (including pre-natal care); income and food availability in the family; the availability of clean water and safe sanitation; and the overall safety of the child's environment.

Third, U5MR is less susceptible than, say, per capita GNP to the fallacy of the average. This is because the natural scale does not allow the children of the rich to be one thousand times as likely to survive, even if the man-made scale does permits them to have one thousand times as much income. In other words, it is much more difficult for a wealthy minority to affect a nation's U5MR, and it therefore presents a more accurate, if far from perfect, picture of the health status of the majority of children (and of society as a whole).

For these reasons, the U5MR is chosen by UNICEF as its single most important indicator of the state of a nation's children. That is why the statistical annex lists the nations of the world not in ascending order of their per capita GNP but in descending order of their under-five mortality rates.

Measuring the rate of progress

The speed of progress in reducing the U5MR can be measured by calculating its average annual reduction rate (AARR). Unlike the comparison of absolute changes, the AARR reflects the fact that the limits to U5MR are approached only with increasing difficulty. As lower levels of under-five mortality are reached, for example, the same absolute reduction obviously represents a greater percentage reduction. The AARR therefore shows a higher rate of progress for, say, a five point reduction if that reduction happens at a lower level of under-five mortality. (A fall in U5MR of 10 points from 100 to 90 represents a reduction of 10%, whereas the same 10-point fall from 20 to 10 represents a reduction of 50%.)

When used in conjunction with GNP growth rates, the U5MR and its reduction rate can therefore give a picture of the progress being made by any country or region, and over any period of time, towards the satisfaction of some of the most essential of human needs.

As Table 9 shows, there is no fixed relationship between the annual reduction rate of U5MR and the annual rate of progress in per capita GNP. Such comparisons help to throw the emphasis on to the policies, priorities, and other factors which determine the ratio between economic and social progress.

Finally, the table gives the total fertility rate for each country and its average annual rate of reduction. It will be seen that many of the nations which have achieved significant reductions in U5MR have also achieved significant reductions in fertility.

TABLE 9: THE RATE OF PROGRESS

		Under 5 mortality rate						GNP per capita average annual growth rate (%)		Total fertility rate				
					average annual rate of reduction (%)								average annual rate of reduction (%)	
		1960	1980	1988	1960-80	1980-88	required ** 1988-2000	1965-80	1980-87	1960	1980	1988	1960-80	1980-88
	Very high U5MR countries (over 170) Median	**314**	**240**	**203**	**1.3**	**1.6**	**8.9**	**1.5**	**-1.7**	**6.7**	**6.5**	**6.5**	**-0.1**	**0.0**
1	Afghanistan	380	321	300	0.8	0.9	12.1	0.6		6.9	7.1	6.9	-0.1	0.4
2	Mozambique	330	258	298	1.2	-1.8	12.1		-8.2	6.3	6.5	6.4	-0.2	0.2
3	Mali	370	323	292	0.7	1.3	11.9	2.1x	0.5	6.4	6.7	6.7	-0.2	0.0
4	Angola	346	272	292	1.2	-0.9	11.9			6.4	6.4	6.4	0.0	0.0
5	Sierra Leone	386	300	266	1.3	1.5	11.1	0.7	-2.0	6.2	6.5	6.5	-0.2	0.0
6	Malawi	364	300	262	1.0	1.7	11.0	3.2	0.0	6.9	7.0	7.0	-0.1	0.0
7	Ethiopia	294	260	259	0.6	0.1	10.9	0.4	-1.6	6.7	6.5	6.2	0.2	0.6
8	Guinea	346	281	248	1.0	1.6	10.5	1.3		6.4	6.2	6.2	0.2	0.0
9	Burkina Faso	362	265	233	1.6	1.6	10.0	1.7	2.5	6.8	6.5	6.5	0.2	0.0
10	Niger	320	258	228	1.1	1.6	9.8	-2.5	-4.9	7.0	7.1	7.1	-0.1	0.0
11	Chad	326	253	223	1.3	1.6	9.7	-1.9		6.0	5.9	5.9	0.1	0.0
12	Central African Rep	308	244	223	1.2	1.1	9.7	0.8	-0.7	5.6	5.9	5.9	-0.3	0.0
13	Somalia	294	247	221	0.9	1.4	9.6	-0.1	-2.5	6.6	6.6	6.6	0.0	0.0
14	Mauritania	320	249	220	1.3	1.6	9.5	-0.1	-1.6	6.5	6.5	6.5	0.0	0.0
15	Rwanda	248	231	206	0.4	1.4	9.0	1.6	-1.0	7.5	8.5	8.3	-0.6	0.3
16	Kampuchea	218	330	199	-2.1	6.3	8.7			6.3	4.6	4.7	1.6	-0.3
17	Yemen, Dem	378	236	197	2.4	2.3	8.6		-6.1	7.0	6.9	6.7	0.1	0.4
18	Nepal	297	222	197	1.5	1.5	8.6	0.0		5.8	6.4	5.9	-0.5	1.0
19	Bhutan	297	222	197	1.5	1.5	8.6		0.0	6.0	5.6	5.5	0.3	0.2
20	Yemen	378	227	190	2.6	2.2	8.3	6.5x	2.0	7.0	7.1	7.0	-0.1	0.2
21	Burundi	258	215	188	0.9	1.7	8.2	2.4	-0.1	5.5	6.4	6.3	-0.8	0.2
22	Bangladesh	262	211	188	1.1	1.4	8.2	-0.3	0.8	6.7	6.4	5.5	0.2	1.9
23	Benin	310	211	185	1.9	1.6	8.1	-0.3	-0.8	6.8	7.0	7.0	-0.1	0.0
24	Madagascar	364	216	184	2.6	2.0	8.1	-0.4	-3.7	6.6	6.6	6.6	0.0	0.0
25	Sudan	293	210	181	1.7	1.9	7.9	0.8	-4.3	6.7	6.6	6.4	0.1	0.4
26	Tanzania	248	201	176	1.1	1.7	7.7	0.8	-1.7	6.8	7.1	7.1	-0.2	0.0
27	Namibia	262	202	176	1.3	1.7	7.7			6.0	6.1	6.1	-0.1	0.0
28	Nigeria	318	198	174	2.4	1.6	7.6	4.2	-4.7	6.8	7.1	7.0	-0.2	0.2
29	Bolivia	282	207	172	1.6	2.3	7.5	1.7	-4.9	6.7	6.3	6.0	0.3	0.6
30	Haiti	294	197	171	2.0	1.8	7.4	0.9	-2.1	6.2	5.2	4.7	0.9	1.3
	High U5MR countries (95-170) Median	**241**	**152**	**125**	**2.3**	**2.2**	**4.8**	**1.8**	**-1.3**	**6.9**	**6.3**	**5.8**	**0.0**	**1.1**
31	Uganda	224	187	169	0.9	1.3	7.4	-2.2	-2.4	6.9	6.9	6.9	0.0	0.0
32	Gabon	288	194	169	2.0	1.7	7.4	5.6	-3.5	4.1	4.4	5.0	-0.4	-1.6
33	Pakistan	277	192	166	1.8	1.8	7.2	1.8	3.3	6.9	7.0	6.4	-0.1	1.1
34	Laos	232	189	159	1.0	2.2	6.8			6.2	6.2	5.7	0.0	1.1
35	Togo	305	176	153	2.8	1.8	6.5	1.7	-3.4	6.1	6.1	6.1	0.0	0.0
36	Cameroon	275	176	153	2.2	1.8	6.5	2.4	4.5	5.8	6.3	5.7	-0.4	1.3
37	India	282	180	149	2.2	2.4	6.3	1.5	3.2	5.9	4.8	4.3	1.0	1.4
38	Liberia	258	173	147	2.0	2.0	6.2	0.5	-5.2	6.2	6.5	6.5	-0.2	0.0
39	Ghana	224	165	146	1.5	1.5	6.1	-0.8	-2.0	6.9	6.5	6.4	0.3	0.2
40	Côte d'Ivoire	264	166	142	2.3	2.0	5.9	2.8	-3.0	7.2	7.4	7.4	-0.1	0.0
41	Zaire	251	174x	138x	1.8	2.9	5.7	-1.3	-2.5	6.0	6.1	6.1	-0.1	0.0
42	Senegal	313	205x	136x	2.1	5.1	5.5	-0.5	0.1	6.7	6.5	6.4	0.2	0.2
43	Lesotho	208	161	136	1.3	2.1	5.5	6.8	-0.9	5.8	5.8	5.8	0.0	0.0
44	Zambia	228	146	127	2.2	1.7	5.0	-1.2	-5.6	6.6	7.2	7.2	-0.4	0.0
45	Egypt	300	164	125	3.0	3.4	4.8	2.8	2.9	7.0	5.3	4.8	1.4	1.2
46	Peru	233	144	123	2.4	2.0	4.7	0.8	-1.0	6.9	5.2	4.4	1.4	2.1
47	Morocco	265	152	119	2.8	3.1	4.4	2.7	0.3	7.2	5.7	4.8	1.2	2.2
48	Libyan Arab Jamahiriya	268	150	119	2.9	2.9	4.4		-10.5	7.1	7.3	6.8	-0.1	0.9
49	Indonesia	235	145	119	2.4	2.5	4.4	5.2	1.7	5.5	4.4	3.2	1.1	4.0
50	Congo	241	132	114	3.0	1.8	4.6	2.7	1.7	5.8	6.0	6.0	-0.2	0.0
51	Zimbabwe	182	132	113	1.6	1.9	4.5	1.7	-1.3	7.5	6.4	5.8	0.8	1.2
52	Kenya	208	133	113	2.2	2.0	4.4	3.1	-0.9	8.0	8.1	8.1	-0.1	0.0
53	Honduras	232	140	107	2.5	3.4	3.5	1.1	-2.0	7.3	6.4	5.5	0.7	1.9
54	Algeria	270	147	107	3.0	4.0	3.5	4.2	0.6	7.3	6.9	6.0	0.3	1.8
55	Guatemala	230	130	99	2.9	3.4	3.5	3.0	-3.6	6.9	6.3	5.7	0.5	1.3
56	Saudi Arabia	292	131	98	4.0	3.6	3.3	4.0x	-11.8	7.2	7.3	7.2	-0.1	0.2
57	South Africa	192	120	95	2.4	2.9	3.8	3.2	-1.3	6.5	4.9	4.4	1.4	1.4
58	Nicaragua	210	132	95	2.3	4.1	3.0	-0.7	-4.7	7.3	6.1	5.5	0.9	1.3
59	Myanmar	229	118	95	3.3	2.7	4.0	1.6		6.0	4.8	4.0	1.1	2.3

Note nations are listed in descending order of their 1988 under five mortality rates (see table 1)

		Under 5 mortality rate						GNP per capita average annual growth rate (%)		Total fertility rate				
					average annual rate of reduction (%)								average annual rate of reduction (%)	
		1960	1980	1988	1960-80	1980-88	required ** 1988-2000	1965-80	1980-87	1960	1980	1988	1960-80	1980-88
	Middle U5MR countries (31-94) Median	**155**	**79**	**63**	**3.5**	**3.3**	**3.5**	**4.0**	**-1.3**	**6.5**	**4.4**	**3.7**	**1.6**	**1.7**
60	Iraq	222	110	94	3.5	2.0	4.5			7.2	6.8	6.3	0.3	1.0
61	Turkey	256	133	93	3.3	4.5	2.7	3.6	3.0	6.3	4.1	3.5	2.2	2.0
62	Botswana	174	110	92	2.3	2.2	4.3	9.9	8.0	6.8	6.6	6.2	0.2	0.8
63	Iran, Islamic Rep. of	254	130	90	3.4	4.6	2.7	2.9		7.2	5.8	5.6	1.1	0.4
64	Viet Nam	233	116	88	3.5	3.5	3.5			6.0	5.2	4.0	0.7	3.3
65	Ecuador	183	107	87	2.7	2.6	4.0	5.4	-2.0	6.9	5.2	4.6	1.4	1.5
66	Brazil	160	103	85	2.2	2.4	4.1	6.3	1.0	6.2	4.0	3.4	2.2	2.0
67	El Salvador	206	110	84	3.1	3.4	3.5	1.5	-2.0	6.8	5.5	4.8	1.1	1.7
68	Tunisia	255	113	83	4.1	3.9	3.1	4.7	0.7	7.1	5.3	4.0	1.5	3.5
69	Papua New Guinea	247	111	81	4.0	3.9	3.1		0.1	6.3	6.0	5.7	0.2	0.6
70	Dominican Rep.	200	102	81	3.4	2.9	3.9	3.8	-1.5	7.4	4.5	3.7	2.5	2.5
71	Philippines	135	86	73	2.3	2.1	4.4	3.2	-3.3	6.8	4.9	4.3	1.6	1.6
72	Guyana	126x	82x	71x	2.2	1.8	4.6	0.7x	-6.7	6.4	3.6	2.7	2.9	3.6
73	Mexico	140	83	68	2.6	2.5	4.0	3.6	-1.6	6.8	4.5	3.5	2.1	3.1
74	Colombia	148	78	68	3.2	1.7	4.6	3.7	0.9	6.7	4.1	3.5	2.5	2.0
75	Syria	218	87	64	4.6	3.8	3.1	5.1	-3.2	7.3	7.3	6.7	0.0	1.1
76	Oman	378	146	64	4.8	10.3	0.0	9.0	8.6	7.2	7.2	7.2	0.0	0.0
77	Paraguay	134	70	62	3.3	1.5	4.8	4.1	-2.1	6.8	4.9	4.6	1.6	0.8
78	Mongolia	158	77	59	3.6	3.3	3.5			5.7	5.5	5.4	0.2	0.2
79	Jordan	218	80	57	5.0	4.2	3.0	5.8x	-0.7	7.7	7.3	7.2	0.3	0.2
80	Lebanon	92	62	51	2.0	2.4	4.2			6.3	4.0	3.3	2.3	2.4
81	Thailand	149	67	49	4.0	3.9	3.1	4.4	3.4	6.4	3.9	2.5	2.5	5.6
82	Venezuela	114	50	44	4.1	1.6	4.7	2.3	-3.1	6.5	4.3	3.7	2.1	1.9
83	Sri Lanka	113	58	43	3.3	3.7	3.3	2.8	3.0	5.3	3.5	2.6	2.1	3.7
84	China	202	56	43	6.4	3.3	3.6	4.1	9.1	5.7	2.6	2.4	3.9	1.0
85	Argentina	75	46	37	2.4	2.7	4.0	1.7	-1.8	3.1	3.3	2.9	-0.3	1.6
86	Panama	105	43	34	4.5	2.9	3.6	2.8	0.3	5.9	3.8	3.1	2.2	2.5
87	Albania	151	58	34	4.8	6.7	1.3			5.9	3.8	3.0	2.2	3.0
88	Korea, Dem.	120	43	33	5.1	3.3	3.4			5.7	4.3	3.6	1.4	2.2
89	Korea, Rep.	120	43	33	5.1	3.3	3.4	7.3	7.3	5.7	2.6	2.0	3.9	3.3
90	United Arab Emirates	239	43	32	8.6	3.7	3.1		-9.3	6.9	5.4	4.8	1.2	1.5
91	Malaysia	106	42	32	4.6	3.4	3.5	4.7	1.1	6.8	4.0	3.5	2.7	1.7
92	USSR	53	33	32	2.4	0.4	5.3			2.7	2.3	2.4	0.8	-0.5
93	Uruguay	56	43	31	1.3	4.1	2.9	2.5	-2.3	2.9	2.8	2.6	0.2	0.9
	Low U5MR countries (30 and under) Median	**44**	**17**	**12**	**4.6**	**4.0**	**2.9**	**3.3**	**1.6**	**2.9**	**2.0**	**1.7**	**2.0**	**1.3**
94	Mauritius	104	42	29	4.5	4.6	2.7	3.7	4.4	5.9	2.7	1.9	3.9	4.4
95	Yugoslavia	113	36	28	5.7	3.1	3.7	5.2	0.0	2.8	2.1	1.9	1.4	1.3
96	Romania	82	35	28	4.3	2.8	3.7			2.3	2.4	2.1	-0.2	1.7
97	Chile	142	43	26	6.0	6.3	1.4	0.0	-1.1	5.3	2.8	2.7	3.2	0.5
98	Trinidad and Tobago	67	29	23	4.2	2.9	3.6	3.1	-6.5	5.2	3.0	2.7	2.8	1.3
99	Kuwait	128	34	22	6.6	5.4	2.2	0.6x	-3.2	7.3	5.6	4.8	1.3	1.9
100	Jamaica	88	29	22	5.6	3.5	3.2	-0.1	-2.5	5.2	3.7	2.8	1.7	3.5
101	Costa Rica	121	31	22	6.8	4.3	2.7	3.3	-0.5	7.0	3.7	3.2	3.2	1.8
102	Bulgaria	69	25	20	5.1	2.8	3.6			2.2	2.1	1.9	0.2	1.3
103	Hungary	57	26	19	3.9	3.9	3.2	5.1	1.8	2.0	2.0	1.7	0.0	2.0
104	Poland	70	24	18	5.4	3.6	3.4			3.0	2.3	2.2	1.3	0.6
105	Cuba	87	27	18	5.9	5.1	2.1			4.2	2.0	1.7	3.7	2.0
106	Greece	64	23	18	5.1	3.1	3.4	4.8	0.0	2.2	2.1	1.7	0.2	2.6
107	Portugal	112	29	17	6.8	6.7	1.0	4.6	1.4	3.1	2.2	1.7	1.7	3.2
108	Czechoslovakia	32	21	15	2.1	4.2	2.6			2.5	2.2	2.0	0.6	1.2
109	Israel	40	18	14	4.0	3.1	3.7	3.7	1.5	3.9	3.3	2.9	0.8	1.6
110	USA	30	16	13	3.1	2.6	4.1	1.8	2.0	3.5	1.9	1.8	3.1	0.7
111	Belgium	35	17	13	3.6	3.4	3.1	3.6	1.3	2.6	1.7	1.5	2.1	1.6
112	German Dem.	44	17	12	4.8	4.4	2.4			2.3	1.8	1.7	1.2	0.7
113	Singapore	50	15	12	6.0	2.8	3.4	8.3	5.7	5.5	1.8	1.6	5.6	1.5
114	New Zealand	27	15	12	2.9	2.8	3.4	1.7	1.3	3.9	2.1	1.9	3.1	1.3
115	Spain	56	17	12	6.0	4.4	2.4	4.1	1.6	2.8	2.2	1.7	1.2	3.2
116	Denmark	25	11	11	4.1	0.0	5.1	2.2	2.5	2.6	1.6	1.5	2.4	0.8
117	United Kingdom	27	16	11	2.6	4.7	2.7	2.0	2.6	2.7	1.8	1.8	2.0	0.0
118	Italy	50	18	11	5.1	6.2	1.7	3.2	1.8	2.4	1.7	1.4	1.7	2.4
119	Australia	25	14	10	2.9	4.2	3.0	2.2	1.4	3.3	2.0	1.8	2.5	1.3
120	Germany, Fed.	40	17	10	4.3	6.6	0.9	3.0	1.8	2.4	1.4	1.4	2.7	0.0
121	Hong Kong	65	14	10	7.7	4.2	3.0	6.2	5.3	5.0	2.1	1.7	4.3	2.6
122	Austria	43	18	10	4.4	7.4	0.9	4.0	1.6	2.6	1.6	1.5	2.4	0.8
123	Norway	23	10	10	4.2	0.0	5.8	3.6	3.7	2.9	1.7	1.7	2.7	0.0
124	France	34	13	10	4.8	3.3	3.0	3.7	0.9	2.8	1.9	1.8	1.9	0.7
125	Ireland	36	15	9	4.4	6.4	1.0	2.8		3.8	3.2	2.5	0.9	3.1
126	Netherlands	22	10	8	3.9	2.8	3.9	2.7		3.1	1.5	1.4	3.6	0.9
127	Canada	33	13	8	4.7	6.1	1.1	3.3	2.1	3.8	1.7	1.6	4.0	0.8
128	Japan	40	12	8	6.0	5.1	2.4	5.1	3.2	2.0	1.8	1.7	0.5	0.7
129	Switzerland	27	11	8	4.5	4.0	2.4	1.5	1.6	2.4	1.5	1.6	2.4	-0.8
130	Sweden	20	9	7	4.0	3.1	2.8	2.0	1.9	2.3	1.7	1.6	1.5	0.8
131	Finland	28	9	7	5.7	3.1	2.8	3.6	2.5	2.7	1.7	1.6	2.3	0.8

Footnotes to Tables

Table 1:
Basic Indicators

Angola	GNP per capita	1980
Bulgaria	GNP per capita	1980
Burundi	Adult literacy	1982
Chile	Adult literacy	1984
Cuba	Adult literacy	1981, age 10 years and older
Czechoslovakia	GNP per capita	1980
Ethiopia	Adult literacy	1986
German Dem. Rep.	GNP per capita	1980
Guyana	Under five mortality rate	Provisional
	Infant mortality rate	Provisional
Iraq	GNP per capita	1980
Korea, Rep. of	Adult literacy	1982
Mauritania	Adult literacy	1982
Myanmar	GNP per capita	1986
Nicaragua	Adult literacy	1983
Poland	GNP per capita	1986
Romania	GNP per capita	1983
Saudi Arabia	Adult literacy	1982
Senegal	Under five mortality rate	Provisional
	Infant mortality rate	Provisional
Tanzania, U. Rep. of	Adult literacy	1986
Turkey	Adult literacy	1984
USSR	GNP per capita	1980
Zaire	Under five mortality rate	Provisional
	Infant mortality rate	Provisional

Table 2:
Nutrition

Angola	Low birth-weight	Luanda only
Australia	Low birth-weight	1979
Bangladesh	Breast-feeding	1975-6
	Underweight	Gomez, 6-71 months
	Wasting	Less than 80% of median
	Stunting	Less than 90% of median
Bolivia	Underweight	6-59 months
Botswana	Wasting	Clinic data
	Stunting	Clinic data
Brazil	Underweight	North-East only
	Wasting	North-East only
	Stunting	North-East only
Burundi	Low birth-weight	1980-1, Bujumbura only
	Underweight	3-36 months
	Stunting	24-36 months
Cameroon	Low birth-weight	1980-1, Yaounde only
	Breast-feeding	1978
	Underweight	1978, 3-47 months
	Wasting	1978
	Stunting	1978
Chad	Low birth-weight	1965
Chile	Underweight	0-71 months
	Stunting	24-71 months
China	Low birth-weight	Beijing only
	Breast-feeding	Rural only
Colombia	Underweight	3-36 months
	Stunting	24-36 months
Côte d'Ivoire	Low birth-weight	1975, Abidjan only
	Wasting	0-23 months
	Stunting	Less than 90% of median
Cuba	Wasting	Lowest 3 percentiles
		12-59 months
Dominican Rep.	Underweight	6-36 months
	Stunting	24-36 months
Ecuador	Underweight	Gomez
Egypt	Low birth-weight	Cairo only
	Underweight	Gomez, 6-71 months
	Wasting	1978
El Salvador	Stunting	Rural only
Ethiopia	Underweight	Data from 9 zones
	Wasting	Data from 9 zones
	Stunting	Data from 9 zones
Finland	Breast-feeding	1972
Germany, Fed. Rep. of	Low birth-weight	1980
Guatemala	Low birth-weight	1980
	Breast-feeding	1978
	Underweight	3-36 months
	Stunting	24-36 months
Guyana	Breast-feeding	1975
Haiti	Low birth-weight	1978
	Underweight	1978, Gomez
	Wasting	1978
	Stunting	1978
Honduras	Wasting	0-59 months
	Stunting	0-59 months
India	Underweight	Gomez, 12-71 months
Indonesia	Low birth-weight	1980
	Underweight	Moderate & severe < 80% median
		Severe less than 60% median
	Wasting	1977

continued over

Iran, Islamic Rep. of	Underweight	National rural
	Wasting	National rural
	Stunting	National rural
Iraq	Low birth-weight	1973
Jamaica	Underweight	1978
	Wasting	Less than 80% of median
	Stunting	Less than 90% of median
Jordan	Low birth-weight	1979
Kenya	Breast-feeding	1977-8
	Wasting	National rural
	Stunting	National rural
Korea, Rep. of	Breast-feeding	1978
Kuwait	Breast-feeding	1978-9
Lao People's Dem. Rep.	Breast-feeding	5 provinces only
Lesotho	Underweight	6 districts
Liberia	Wasting	1976
	Stunting	1976
Madagascar	Underweight	0-23 months
	Stunting	12-23 months
Malaysia	Wasting	Sabah state only
	Stunting	Sabah state only
Mali	Breast-feeding	Bamako only
	Underweight	3-36 months
	Stunting	24-36 months
Mauritius	Wasting	0-59 months
	Stunting	0-59 months
Mexico	Low birth-weight	1978
	Breast-feeding	1979
Morocco	Underweight	0-36 months
	Stunting	24-36 months
Myanmar	Underweight	0-35 months
	Stunting	24-35 months
Nepal	Breast-feeding	1976
Netherlands	Breast-feeding	Exclud. Amsterdam & Rotterdam
Niger	Low birth-weight	1981
	Wasting	0-59 months
	Stunting	0-59 months
Nigeria	Low birth-weight	1975-80, Lagos only
	Wasting	National rural
		0-59 months
Norway	Low birth-weight	1980
Pakistan	Underweight	Gamez
	Wasting	< 80% of median, 13-24 months
	Stunting	< 90% of median, 25-60 months
Papua New Guinea	Low birth-weight	1979
Paraguay	Low birth-weight	1981
	Breast-feeding	1979
Peru	Underweight	0-71 months
Philippines	Breast-feeding	1978
	Underweight	0-71 months
Poland	Breast-feeding	1977
Rwanda	Low birth-weight	1971
Saudi Arabia	Low birth-weight	Riyadh only
Senegal	Low birth-weight	1980-1, Dakar only
	Breast-feeding	1978
	Underweight	6-36 months
	Stunting	24-36 months
Sierra Leone	Underweight	1977-8
South Africa	Low birth-weight	Capetown only
Sri Lanka	Low birth-weight	1981
	Underweight	3-36 months
	Stunting	24-36 months
Sudan	Wasting	Northern part
		0-59 months
Switzerland	Low birth-weight	1979
Syrian Arab Rep.	Breast-feeding	1978
Thailand	Underweight	3-36 months
	Stunting	24-36 months
Togo	Breast-feeding	1976-7
Trinidad and Tobago	Underweight	3-36 months
	Stunting	24-36 months
Tunisia	Low birth-weight	1974
	Wasting	1975
	Stunting	1975
Turkey	Low birth-weight	1980
United Arab Emirates	Low birth-weight	1979
Uruguay	Low birth-weight	1977
	Underweight	0-71 months
	Stunting	0-71 months
Venezuela	Breast-feeding	1977
Viet Nam	Stunting	0-59 months
Yemen	Breast-feeding	1979
	Underweight	1979, 6-59 months
	Wasting	1979
	Stunting	1979
Yemen, Dem.	Low birth-weight	Hospital data only
	Underweight	0-65 months
	Stunting	0-53 months
Yugoslavia	Low birth-weight	1980

continued over

Zambia	Low birth-weight	1971-2, Kitwe only
	Wasting	1970-2
	Stunting	1970-2
Zimbabwe	Low birth-weight	1972-3, Harare only
	Underweight	3-60 months
	Wasting	3-60 months
	Stunting	3-60 months

Gomez – moderate & severe – below 75% of median weight for age of reference population;
severe – below 60% of median weight for age of reference population

Table 3:
Health

Australia	Measles	1985
Finland	TB, DPT, Polio, Measles	1983-6
Germany, Fed. Rep. of	TB, DPT, Polio, Measles	1985-7
Japan	TB, DPT, Polio, Measles	1984-5
Libyan Arab Jamahiriya	TB, DPT, Polio, Measles, Tetanus	1985-87
New Zealand	TB, DPT, Polio, Measles	1986
Sudan	TB, DPT, Polio, Measles, Tetanus	Part of country only
Sweden	TB, DPT, Polio, Measles	1986
Togo	TB, DPT, Polio, Measles	Less than 23 months of age
USA	Measles	1985
USSR	TB, DPT, Polio, Measles	1985-6
Venezuela	TB	1986
Viet Nam	TB, DPT, Polio, Measles	Provisional

Table 4:
Education

Burundi	Adult literacy	1982
Chile	Adult literacy	1984
Cuba	Adult literacy	1981, age 10 years and older
Haiti	Adult literacy (1970)	1971
Hong Kong	Adult literacy (1970)	1971
Korea, Rep. of	Adult literacy	1982
Lebanon	Adult literacy (1970)	Age 10 years and older
Pakistan	Primary completion	1981
Paraguay	Adult literacy (1970)	1972
Saudi Arabia	Adult literacy	1982
Tanzania, U. Rep. of	Adult literacy	1986
Turkey	Adult literacy	1984
Uruguay	Adult literacy (1970)	1975

Table 6:
Economic Indicators

Angola	GNP per capita	1980
Bolivia	Poverty level	1975
Bulgaria	GNP per capita	1980
Chad	Poverty level	1976
Czechoslovakia	GNP per capita	1980
German Dem. Rep.	GNP per capita	1980
Guyana	GNP per capita growth rate	1970-80
Iraq	GNP per capita	1980
Jordan	GNP per capita growth rate	1970-80
Kuwait	GNP per capita growth rate	1965-86
Mali	GNP per capita growth rate	1967-80
	Poverty level	1975
Myanmar	GNP per capita	1986
Poland	GNP per capita	1986
Romania	GNP per capita	1980
Saudi Arabia	GNP per capita growth rate	1965-86
Sudan	Poverty level	1975
USSR	GNP per capita	1980
Yemen	GNP per capita growth rate	1970-80

Table 7:
Women

Afghanistan	Maternal mortality	1975
Algeria	Maternal mortality	1978
Australia	Births attended	1982
Austria	Contraceptive prevalence	Marriage cohorts of 1974 & 78
Belgium	Contraceptive prevalence	Flemish population
Bulgaria	Contraceptive prevalence	1976
Burundi	Adult literacy	1982
Cameroon	Contraceptive prevalence	1978
	Maternal mortality	1978
Chad	Births attended	1981
	Maternal mortality	1972
Chile	Adult literacy	1984
Congo	Maternal mortality	1971
Costa Rica	Births attended	1975
Cuba	Adult literacy	1981, age 10 years and older
Czechoslovakia	Contraceptive prevalence	Ever used while married
Denmark	Contraceptive prevalence	1975, during past 2 months
	Births attended	1979
Finland	Contraceptive prevalence	1977
	Births attended	1979

continued over

France	Contraceptive prevalence	1978
	Births attended	1976
German Dem. Rep.	Births attended	1977
Germany, Fed. Rep. of	Births attended	1979
Ghana	Contraceptive prevalence	1979
Greece	Births attended	1978
Guinea	Contraceptive prevalence	1977
Guyana	Contraceptive prevalence	1975
Hungary	Births attended	1982
Israel	Births attended	1980
Italy	Contraceptive prevalence	1979, since last pregnancy
	Births attended	1979
Kenya	Maternal mortality	1977
Korea, Rep. of	Adult literacy	1982
	Births attended	1982
Lesotho	Contraceptive prevalence	1977
Libyan Arab Jamahiriya	Tetanus	1985-87
	Births attended	1976
	Maternal mortality	1978
Malawi	Maternal mortality	All health institutions
Morocco	Births attended	1980
	Maternal mortality	1974
Netherlands	Contraceptive prevalence	Married women 21-39 years
	Births attended	1978
New Zealand	Contraceptive prevalence	1976
Niger	Contraceptive prevalence	1977
Nigeria	Births attended	1980
Norway	Contraceptive prevalence	1977, during past 4 weeks
	Births attended	1974
Pakistan	Births attended	1976
Poland	Contraceptive prevalence	1977
	Births attended	1980
Portugal	Births attended	1978
Romania	Contraceptive prevalence	1978
	Births attended	1979
Rwanda	Maternal mortality	All hospitals
Saudi Arabia	Adult literacy	1982
Senegal	Births attended	1978
South Africa	Maternal mortality	From 267 hospitals
Sudan	Tetanus	Part of country only
	Contraceptive prevalence	1978-9
Sweden	Births attended	1976
Switzerland	Contraceptive prevalence	Marriage cohorts of 1970-9
	Births attended	1976
Syrian Arab Rep.	Contraceptive prevalence	1978
	Births attended	1979
Tanzania, U. Rep. of	Adult literacy	1986
	Maternal mortality	From 48 hospitals, all regions
Thailand	Births attended	1980
Tunisia	Maternal mortality	1971
Turkey	Adult literacy	1984
United Kingdom	Births attended	1978
Venezuela	Contraceptive prevalence	1977
	Births attended	1982
Viet Nam	Births attended	1982
Yemen	Contraceptive prevalence	1979
Yugoslavia	Contraceptive prevalence	1976, during last 6 months
	Births attended	1979
Zimbabwe	Maternal mortality	1979

Table 8:

Basic indicators on less populous countries

Antigua	Under five mortality rate	1987
	Infant mortality rate	1987
Bahrain	GNP per capita	1986
Barbados	Primary enrolment	1984
Belize	Under five mortality rate	1987
	Infant mortality rate	1987
	Life expectancy	1987
Comoros	Adult literacy	1980
Djibouti	Under five mortality rate	Provisional
	GNP per capita	1981
Dominica	Infant mortality rate	1987
Equatorial Guinea	GNP per capita	1981
Grenada	Infant mortality rate	1987
Maldives	Under five mortality rate	1985
	Infant mortality rate	1985
	Adult literacy	1987
Qatar	Adult literacy	1981
Saint Lucia	Infant mortality rate	1987
Saint Vincent	Infant mortality rate	1985
Samoa	Infant mortality rate	1985
Sao Tome and Principe	Under five mortality rate	1985
	Infant mortality rate	1985
	Adult literacy	1981
Seychelles	Under five mortality rate	1987
	Infant mortality rate	1987
	Primary enrolment	1982
Solomon Islands	Infant mortality rate	1987
St. Christopher-Nevis	Infant mortality rate	1987
Vanuatu	Infant mortality rate	1985
	Adult literacy	1979

continued over

Table 9:

The rate of progress

Guyana	Under five mortality rate	Provisional
	GNP per capita growth rate	1970-80
Jordan	GNP per capita growth rate	1970-80
Kuwait	GNP per capita growth rate	1965-86
Mali	GNP per capita growth rate	1967-80
Saudi Arabia	GNP per capita growth rate	1965-86
Senegal	Under five mortality rate	Provisional
Yemen	GNP per capita growth rate	1970-80
Zaire	Under five mortality rate	Provisional

Definitions

Under five mortality rate:	annual number of deaths of children under five years of age per 1,000 live births. More specifically this is the probability of dying between birth and exactly five years of age
Infant mortality rate:	annual number of deaths of infants under one year of age per 1,000 live births. More specifically this is the probability of dying between birth and exactly one year of age
GNP:	gross national product. Annual GNP's per capita are expressed in current United States dollars. GNP per capita growth rates are annual average growth rates that have been computed by fitting trend lines to the logarithmic values of GNP per capita at constant market prices for each year of the time period
Life expectancy at birth:	the number of years new-born children would live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth
Adult literacy rate:	percentage of persons aged 15 and over who can read and write
Primary and secondary enrolment ratios:	the gross enrolment ratio is the total number of children enrolled in a schooling level – whether or not they belong in the relevant age group for that level – expressed as a percentage of the total number of children in the relevant age group for that level. The net enrolment ratio is the total number of children enrolled in a schooling level who belong in the relevant age group, expressed as a percentage of the total number of children in that age group
Income share:	percentage of private income received by the highest 20% and lowest 40% of households
Low birth weight:	2,500 grammes or less
Breast-feeding:	percentage of mothers either wholly or partly breast-feeding
Underweight:	moderate and severe – below minus two standard deviations from median weight for age of reference population; severe – below minus three standard deviations from median weight for age of reference population
Wasting:	moderate and severe – below minus two standard deviations from median weight for height of reference population
Stunting:	moderate and severe – below minus two standard deviations from median height for age of reference population
Access to health services:	percentage of the population that can reach appropriate local health services by the local means of transport in no more than one hour
DPT:	diphtheria, pertussis (whooping cough) and tetanus
ORS use:	percentage of all cases of diarrhoea in children under five years of age treated with oral rehydration salts
Children completing primary school:	percentage of the children entering the first grade of primary school who successfully complete that level in due course
Crude death rate:	annual number of deaths per 1,000 population
Crude birth rate:	annual number of births per 1,000 population
Total fertility rate:	the number of children that would be born per woman, if she were to live to the end of her child-bearing years and bear children at each age in accordance with prevailing age-specific fertility rates
Urban population:	percentage of population living in urban areas as defined according to the national definition used in the most recent population census
Absolute poverty level:	the income level below which a minimum nutritionally adequate diet plus essential non-food requirements is not affordable
ODA:	official development assistance
Debt service:	the sum of interest payments and repayments of principal on external public and publicly guaranteed debts
Contraceptive prevalence:	percentage of married women age 15–49 currently using contraception
Births attended:	percentage of births attended by physicians, nurses, midwives, trained primary health care workers or trained traditional birth attendants
Maternal mortality rate:	annual number of deaths of women from pregnancy related causes per 100,000 live births

Main sources

Under five and infant mortality:	United Nations Population Division and United Nations Statistical Office
Total population:	United Nations Population Division
Births:	United Nations Population Division
Infant and child deaths:	United Nations Population Division and UNICEF
GNP per capita:	World Bank
Life expectancy:	United Nations Population Division
Adult literacy:	United Nations Educational, Scientific and Cultural Organization (UNESCO)
School enrolment and completion:	United Nations Educational, Scientific and Cultural Organization (UNESCO)
Household income:	World Bank
Low birth-weight:	World Health Organization (WHO)
Breast-feeding:	World Health Organization (WHO)
Underweight, wasting and stunting:	World Health Organization (WHO) and Demographic and Health Surveys, Westinghouse
Food production and calorie intake:	Food and Agricultural Organization of the United Nations (FAO)
Income spent on food:	World Bank
Access to drinking water:	World Health Organization (WHO)
Access to health services:	UNICEF
Immunization:	World Health Organization (WHO) and UNICEF
ORS use:	World Health Organization (WHO)
Radio and television:	United Nations Educational, Scientific and Cultural Organization (UNESCO)
Child population:	United Nations Population Division
Crude death and birth rates:	United Nations Population Division
Fertility:	United Nations Population Division
Urban population:	United Nations Population Division
Inflation and absolute poverty level:	World Bank
Expenditure on health, education and defense:	World Bank
ODA:	Organisation for Economic Co-operation and Development (OECD)
Debt service:	World Bank
Contraceptive prevalence:	United Nations Population Division
Births attended:	World Health Organization (WHO)
Maternal mortality:	World Health Organization (WHO)

UNICEF Headquarters
UNICEF House, 3 UN Plaza, New York, NY 10017, USA

UNICEF Geneva Office
Palais des Nations, CH-1211 Geneva 10, Switzerland

UNICEF Regional Office for Eastern and Southern Africa
P.O. Box 44145, Nairobi, Kenya

UNICEF Regional Office for Central and West Africa
P.O. Box 443, Abidjan 04, Côte d'Ivoire

UNICEF Regional Office for the Americas and the Caribbean
Apartado Aéreo 75 55, Bogotá, Colombia

UNICEF Regional Office for East Asia and Pakistan
P.O. Box 2-154, Bangkok, 10200, Thailand

UNICEF Regional Office for the Middle East and North Africa
P.O. Box 811721, Amman, Jordan

UNICEF Regional Office for South Central Asia
UNICEF House, 73 Lodi Estate, New Delhi 110003, India

UNICEF Office for Australia and New Zealand
P.O. Box Q143, Queen Victoria Building, Sydney N.S.W. 2000,
Australia

UNICEF Office for Japan c/o United Nations Information
Centre, 22nd Floor, Shin Aoyama Building Nishikan 1-1,
Minami - Aoyama 1-Chone, Minato-ku Tokyo 107, Japan

THE STATE OF THE WORLD'S CHILDREN 1990

Noting that the governments of the developing world as a whole have now reached the point where half of their total expenditures are being devoted to defence spending and debt servicing, the 1990 *State of the World's Children* report summarises the great set-backs and great achievements of the 1980s and sets out the central challenges for the decade ahead.

On present trends, over 100 million children will die in the 1990s – 50 million of them from just three common diseases which can be inexpensively treated or prevented. Many times that number will grow up malnourished, unhealthy, and illiterate.

A very different future is possible – if the 1990s were to become a 'decade of doing the obvious' for the world's children. Measles, dehydration, and pneumonia, the greatest specific enemies, could be overcome at an almost negligible cost. Today's vital knowledge about nutrition, breastfeeding, and birth spacing could be put at the disposal of all families. These steps alone could reduce child deaths and child malnutrition by as much as half over the next few years. Money alone cannot achieve this: the sustained commitment of political leaders and of the widest possible range of a society's resources will also be necessary. But in financial terms, the cost might be in the region of $2 to $3 billion a year – less than the world spends on armaments *every day*.

With the possibility in the air of significant reductions in military spending, the time has come to give this new priority to the well-being of the world's children. In particular, there is a need to establish the principle, in all nations, that the growing minds and bodies of children should be protected not only from specific abuse but from the sharpest edges of the political and economic processes of adult society.

As the 1990s begin, there are some signs of progress towards this principle. The prospect of a *World Summit for Children*, the new *Convention on the Rights of the Child*, and practical advances such as the near achievement of *Universal Child Immunization*, could mark the beginning of a new priority for children.

Failure to protect the physical, mental and emotional development of the young is the principal means by which humanity's difficulties are compounded and its problems perpetuated. And *special measures* to protect children from the inadequacies and mistakes of the adult world is a principal means by which many of mankind's most fundamental problems might be confronted. The protection of so many millions of the world's young children is therefore both our greatest moral obligation and our greatest potential investment in the world's economic prosperity, political stability, and environmental integrity.

That is why the principle of according children 'first call' on society's concerns and capacities underlies all of the issues discussed in this year's *State of the World's Children* report, as UNICEF believes it should underlie the many decisions and actions which will shape the decade ahead.

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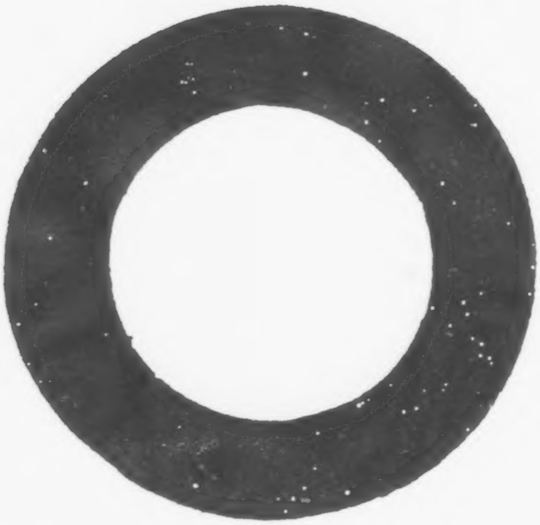

THE STATE OF THE WORLD'S CHILDREN
1990

Press summary

The children of the 90s

The governments of the developing world as a whole are now devoting half of their expenditures to debt servicing and military spending. These two essentially unproductive activities, says this year´s State of the World´s Children report from UNICEF, are now costing almost $1 billion every day - or approximately $400 a year for every family in the developing world.

Meanwhile, says the report, nearly 8,000 children are dying every single day because they have not been immunized; nearly 7,000 are dying every day from dehydration caused by diarrhoea, and approximately 6,000 are dying every day from pneumonia.

Making available today´s low cost solutions to all of these child health problems would cost approximately $2.5 billion a year. "It is a great deal of money," says UNICEF, "It is as much as the Soviet Union has

more ...

been spending on vodka. It is as much as U.S. companies have been spending on advertising cigarettes. It is as much as 10% of the EEC´s annual subsidy to its farmers. It is as much as 2% of the developing world´s military spending."

A Summit for Children

On present trends, more than one hundred million children will die in the decade ahead. "They will die in the sunken-eyed coma of dehydration," says UNICEF, "or in the gasping extremities of pneumonia, or in the iron grip of tetanus, or in the fever of measles, or on the rack of whooping cough".

These five common illnesses - which can all be inexpensively treated or prevented by vaccines, oral rehydration therapy, or antibiotics - account for over half of all child deaths and child malnutrition in the modern world.

Arguing that only high-level political commitment can put today´s low-cost solutions into practice on the necessary scale, UNICEF has called for a World Summit for Children to be held in September, 1990, at the UN headquarters in New York. It would be the first time that Heads of State had met to discuss a major social issue. The Summit would also give a boost to the new Convention on the Rights of the Child, which UNICEF says should become "the standard below which any civilized nation, rich or poor, will be ashamed to fall".

"It is time that the needs of children were given this kind of priority," says UNICEF´s Executive Director James P Grant. "Protecting the physical and mental development of children is the most important of all investments in the social and economic development of our societies. Doing what can now be done to achieve that goal is therefore an issue worthy of its place on the agenda of the world´s political leaders, the world´s press, and the world´s public."

Achievements

The achievements of recent years have shown what can be done if the will is there. Immunization, which protected fewer than 10% of the developing world´s children a decade ago, now reaches 70% and is saving the lives of approximately 2 million a year. Oral

more ...

rehydration therapy, little known outside scientific circles until the early 1980s, is now being used by one family in every three in the developing world and is estimated to be preventing 1 million child deaths each year from diarrhoeal dehydration.

In addition, says UNICEF, there are an estimated one and a half million children who are "walking, running, and playing normally in the villages and neighbourhoods of the developing world today who would be crippled by polio were it not for the immunization efforts of the last decade".

Achievements of this kind, says UNICEF, show that it is possible - in practice - to prevent the majority of illness, malnutrition, and early death among the children of the 1990s.

"These breakthroughs have meant mobilizing today´s new communications capacity to put science at the disposal of the majority of the human family," says Grant. "A further sustained effort to support families everywhere in using new knowledge about the importance of timing births, about exclusive breast-feeding for the first few months of life, and about how to actively promote a child´s nutritional health, could transform the well-being of millions of children in the decade ahead".

Outbreak of peace

Pointing out that military spending has been cut or frozen in the USA, the USSR, China, India, and Pakistan, and that there are now fewer wars being fought than at any time in the last 50 years, UNICEF´s Executive Director James Grant believes that an outbreak of peace could represent an opportunity for the world´s children.

The sums involved are so huge - with the world´s military spending now exceeding the combined incomes of half of humanity - that even a partial escape from today´s levels of military spending could bring new vistas of human achievement suddenly nearer. "Assuming some progress in resolving the debt crisis," says Grant, "then even a 5% or 10% diversion of military spending could provide the additional $50 billion or so each year which is needed to end absolute poverty on the planet within the next ten years, enabling people everywhere to meet their own and their children´s needs for food, water, health care and education".

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"It is UNICEF´s concern to argue," says the report, "that the needs of children should become the new preoccupation as our world struggles free from its long and wasteful preoccupation with war".

The moral argument for this ´new preoccupation´ is an obvious one. "Every single one of the 40,000 children who die each day," says UNICEF, "was a child who had a personality and a potential, a family and a future. And for every child who has died today, several more are living on with malnutrition and ill health, unable to fulfill the mental and physical potential with which they were born".

"Death and suffering on this scale," says Grant, "is simply no longer necessary. It is therefore no longer acceptable. Morality must march with capacity."

But there is also a practical argument. The long-term consequences are well known, says the State of the World´s Children report:

- malnutrition means poor physical and mental growth, poor performance at school and at work, and the perpetuation of poverty from one generation to the next
- high child death rates mean high birth rates and rapid population growth
- lack of education precludes people from contributing fully to, or benefiting fully from, the development of their communities and their nations
- hopelessness and the denial of opportunity erode self-respect and sow the seeds of almost insoluble social problems for future generations
- entrenched injustices, and the parading of unattainable wealth before the eyes of poverty, provoke an instability and violence which often take on a life of their own
- deprivation precludes environmental sensitivity, forcing millions to over-exploit their surroundings in the name of survival."

For these practical and long-term reasons, UNICEF concludes that a major renewal of effort to protect the lives and the development of children would be "the greatest long-term investment which the human race could make in its future economic prosperity, political stability, and environmental integrity".

The State of the World´s Children 1990 is published by Oxford University Press.

Price £3.50, US $8.50.

UNICEF
UNITED NATIONS
CHILDREN'S FUND

News Feature

Children pay debts

The poor world is now paying the rich world $178 billion a year - three times as much as all the aid it receives - to service its debts. One result is that spending on health, nutrition and education has been cut back in many countries over the last five years. "What this means," says UNICEF in its 1990 State of the World's Children report, "is that the heaviest burden of the debt crisis is falling on the growing minds and bodies of children in the developing world".

After decades of steady advance, large areas of the developing world have been sliding backwards in the 1980s. On average, incomes are down 10% in Latin America and 25% in sub-Saharan Africa. "For the very poor who are forced to spend three-quarters of their incomes on food," says UNICEF, "falling wages mean rising malnutrition".

In three-quarters of the nations of Africa and Latin America, health spending per person has declined in the 1980s and the consequences are now becoming visible. Hundreds of health clinics have been closed and many which remain open are understaffed and lacking essential supplies. Infant mortality is known to have risen in parts of Africa and Latin America. The incidence of low birth weight, a sensitive indicator of the well-being of women, has increased in seven nations out of the fifteen for which recent information is available.

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Children have also been paying the Third World´s debt with the loss of their only opportunity to be educated, says UNICEF. In the 37 poorest countries of the world, spending per head on schools has declined by approximately 25% in the last decade. In one out of every five developing countries, primary school numbers have actually declined and in two out of every three countries spending per student is lower now than in 1980.

In addition to these measurable consequences of the debt crisis, UNICEF also cites the concerns expressed by its own staff, working in over 100 nations of the world, who are reporting increases in child abandonment, juvenile delinquency, accidents, and drug abuse.

"The chilling injustice of what is happening," says UNICEF, "is escaping our attention, passing by our windows on the smooth flow of economic analysis, disguising itself in the respectable clothing of the financial vocabulary".

Human capital

"The central thesis of this year´s message from UNICEF," says the agency´s Executive Director James Grant, "is that children should be protected from the worst consequences of the adult world´s excesses and mistakes, whether we are talking about violence or war or about the cumulative effects of economic mismanagement."

Apart from the obvious moral case, the report argues that there is also a strong economic case for protecting the rising generation. "Human capital is a far more important factor in economic growth than physical capital," says economist Dr. Richard Jolly, a Deputy Executive Director of UNICEF. "Investment in human capital in the form of nutrition, basic education, and health cannot be postponed: it either takes place at an appropriate age when the need is present - or it does not. For the young child, there is no second chance. The underemphasized tragedy of the disinvestment in human capital in the 1980s is that the results will be carried forward in stunted bodies and deficient educations well into the 21st century."

In part, the vulnerable could be protected by shifting the balance of spending in their favour. But in many countries, says UNICEF, this will probably not be possible without increased support from the industrialized nations.

"Politically, it is no easy task," says Grant, "to engineer a shift in priorities from urban hospitals

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to rural clinics, from national airlines to domestic bus routes, from prestigious lecture halls to humble primary schools, from meeting the focused expectations of the politically powerful to the diffuse hopes of the poor majority".

"Now is therefore the time for the developing nations to draw up plans for expanding primary education and primary health care systems, for low cost water and sanitation systems, for national nutrition programmes, for reducing child deaths and child illnesses, and for protecting the environment. Given some progress in resolving the debt crisis, such plans could form the basis for an increased and newly directed aid and investment effort in the decade ahead."

"There are increasing signs," says the report, "that increases in aid would be supported by the public of the industrialized world if it was widely felt that aid was being used for the attack on poverty and the defence of the environment."

Sacrifices

The prospects for progress will remain gloomy while more than a quarter of the developing world´s earnings are sluiced away in debt repayments instead of being invested in growth, says the report. But there are some small signs of hope as the 1990s begin.

In the last two years, the total debt of the developing world has fallen for the first time since the crisis began in the early 1980s. "There is also growing recognition," says UNICEF, "that more dramatic and decisive action on debt is in the interests of both industrialized and developing worlds. Such action should include writing off most of the remaining debts owed by Africa to the governments of the western industrialized nations and further reductions in the commercial debts of many Latin American countries".

"Without such action," says UNICEF, "the crisis will cast its shadow over the next decade and the lives, the health, the growth, and the education of millions of children of the 1990s will again be sacrificed on the altar of debt".

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News Featur

Could try harder

The proportion of the developing world´s children who are enrolled in primary school is beginning to fall again after 30 years of educational expansion, says this year´s State of the World´s Children report from UNICEF. In half of the developing nations, the number of 6 to 11 year olds in school is now declining and in two countries out of three educational expenditure per pupil is falling.

"Somehow the momentum of education must be restored," says UNICEF´s Executive Director, James Grant. "Not to acquire basic literacy and numeracy is a serious disability for any child. And the failure of society to invest in education will disable, in some degree, all other development efforts."

Ways and means of reversing this trend will be the most urgent item on the agenda of the first World Conference on Education for All which will meet in March 1990 in Thailand. "What is so preoccupying," says the Director-General of UNESCO, a co-sponsor of the conference, "is that the greatest damage seems to have been done at the very foundation of the educational pyramid, in primary education and in basic literacy for adults and out-of-school youth."

Drop-outs

Education is being squeezed, says the report, by the rise in debt repayments and military spending - which

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now account for half of all government expenditures in the developing world.

At the same time, education is being eroded from within by high drop-out rates. Of the 100 million children who will begin their school careers in the developing world in 1990, for example, over 40 million will drop out before completing primary education. "Most of those children will be unable to fully participate in, or benefit from, the great changes which will surely surround their lives as the 21st century begins," says the report.

In the long-term, no one seriously doubts the priority of investing in schools. It is well established, for example, that education is strongly associated with lower child death rates, lower birth rates, better health and nutrition, and higher incomes. In addition, economic returns from education are higher than from most other kinds of investment. Four years of primary education, for example, can increase farm productivity by 10% or more.

"With such high returns of all kinds available," says Grant, "education for all is an investment which no country can afford not to make".

But faced with so many short-term problems and pressures, governments are finding it difficult to find the resources. Urging action to reduce the crushing burdens of debt servicing and defence spending, UNICEF suggests that progress towards education for all could be resumed in the 1990s by a combination of increased aid and a new priority for primary education.

"In the 1990s," says Grant, "enlarged aid programmes should be designed to support those measures which may offer little immediate advantage but which are essential to the improvement of human lives and human capacities. Aid should be part of a long-term effort to invest in the most reliable of all engines for future growth - a healthy, well-nourished and well-educated people".

Primary priority

The most obvious improvement in efficiency available to most nations would be a tilt in the balance of educational spending in favour of primary schools.

In many countries, a dollar invested in primary education returns twice as much as a dollar invested in higher education. Yet governments commonly devote the majority of educational resources to higher

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education. "Even a small percentage decrease in unit costs of secondary and higher education," argues the World Bank, "could release additional funds for providing basic education to more people".

Increasing the efficiency of existing schools is also a possible ´resource´ for the 1990s. In many schools, operating costs have been so reduced that teachers´ salaries consume 95% of the budget, leaving little or nothing for such essentials as books, writing materials or blackboards.

If the quality of education falls because operating costs are cut, parents may decide that the costs of education outweigh the benefits. "Even when primary education itself is free," says the report, "the cost of sending a child to school, in clothes, equipment, bus fares, ´donations´, contributions to school fund raising efforts, and the loss of a child´s work in fields or homes, can be a large slice of a poor family´s income".

Many parents are deciding that these sacrifices are not worthwhile. And usually it is female children who are withdrawn from school first. "More than two thirds of those children who never go to school, or who drop-out at too early a stage, are female," says UNICEF.

Hope in Bangladesh

The report cites one experiment which may offer a way of reducing costs and expanding primary enrolment. The 2,500 schools so far opened by the Bangladesh Rural Advancement Committee (BRAC) are demonstrating that basic education, including literacy and numeracy, can be provided for as little as $15 per pupil per year. The BRAC method involves parents in building simple classrooms. Educated members of the community are recruited to act as teachers. Aimed particularly at the children of the poor and landless, the programme has been remarkably successful in giving three years of basic education to 8 to 10-year olds, over half of them girls, and graduating 95% of its pupils into the fourth grade of the government education system.

Going beyond formal education, the UNICEF report suggests a new effort to mass-communicate today´s knowledge about such things as health, child care, food production, and environmental improvement. "In the past," says James Grant, "advances in knowledge were usually confined to the privileged, or the literate, or the physically accessible. Today, that need no longer be so."

UNICEF
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News Feature

For better, for worse

´All the world loves a child´ - or so the saying goes. The reality is very different. In country after country, children are beaten, tortured, sexually abused, exploited in factories, abandoned by their parents. They are abducted, sold, conscripted into armies, sent across minefields, killed in armed conflicts.

Every year, nearly 14 million children die of more mundane causes - hunger, disease, and neglect. Many millions more live on with poor health, stunted in mind and body. For lack of a decent education, millions of children are condemned, every year, to a lifetime of ignorance and deprivation.

The catalogue of children´s sufferings is a long and depressing one. But during the past decade public and official attitudes towards children have begun to change in many countries. Children´s basic rights - to survival, health, education, and protection against abuse and exploitation - are beginning to find their way onto the agendas of the world´s political leaders. A new ethic is emerging, says

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this year's State of the World's Children report from UNICEF, in which the health and wellbeing of a nation's children is regarded as the most significant measure of its level of development.

"Protecting the growing minds and bodies of the rising generation," says the report, "should have first claim on a society's concern and children should be able to depend upon that commitment in good times and in bad, in times of peace and in times of war, in times of prosperity and times of recession."

One of the most explicit expressions of this new ethic is the Convention on the Rights of the Child, which has now been presented to the General Assembly of the United Nations in New York. The Convention is the final outcome of ten years of painstaking negotiations between scores of governments, UN agencies and non-governmental organizations. It is, says the UNICEF report, "the first agreement among the nations of the world on the legally defined rights of the child".

The Convention covers three main areas:

First, the right to life - the most basic of all human rights. The Convention recognizes the child's right to adequate food, water, health care, and shelter.

Second, the right to develop one's potential - through education, freedom of information and expression, and freedom of conscience and religion. The Convention also stipulates that parents shall give 'due weight' to the views of children, in accordance with their age and maturity.

Third, protection against violence, abuse, and exploitation in all its many forms. The Convention also covers the rights of mentally or physically disabled children, refugees, and those who are parentless or separated from their parents. It also recognizes that in some cases children need to be protected from their parents, and that some parents may be unable to take proper care of their children.

Once ratified by 20 countries, the Convention enters into force and becomes binding in each ratifying country. A Committee on the Rights of the Child, composed of ten international experts serving in their personal capacities, will be established to monitor the steps taken in individual countries to observe the terms of the Convention.

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But there is a role for everyone in giving teeth to this new, internationally approved legal code of children´s rights.

Political leaders and legal experts can ensure that their countries´ own laws on children are brought into line with the Convention.

Educationalists can incorporate the rights of children into school and college curricula.

The mass media can report on how far the Convention is being observed, nationally, and focus attention on specific abuses.

Concerned individuals and organizations can lobby governments and supply the media with information.

Trade unions and employers federations can negotiate agreements on the protection of children and mothers in the workplace.

Individual governments can establish a high-level authority, such as an ombudsman for children, to monitor and encourage the implementation of the Convention.

"Like many other such documents in history," says UNICEF, "the Convention is a statement of an ideal which few nations have achieved. But as more and more nations ratify its text and begin to enact its provisions into national law, and as press and public become more concerned to ensure its observance, it will gradually become the standard below which any civilized nation, rich or poor, will be ashamed to fall."

The State of the World´s Children 1990 is published by Oxford University Press.

Price £3.50, US $8.50.

UNICEF
UNITED NATIONS
CHILDREN'S FUND

News Feature

Vaccines save 2 million

Vaccines are now saving the lives of 2 million children a year in the developing world, but 3 million are still dying from measles, tetanus, and whooping cough - diseases which vaccines can prevent. With these figures, UNICEF's 1990 State of the World's Children report sums up the achievement of a decade in which the benefits of immunization have been brought to the majority of mankind.

Vaccines now reach almost 70% of the third world's children, up from only 10% at the beginning of the 1980s. "It has been the most dramatic public health advance of the last decade," says UNICEF's Executive Director, James Grant. "Apart from the number of lives saved, there are now an estimated one and a half million children who are running and playing and growing normally in the developing world who would have been crippled by polio were it not for the immunization efforts of the 1980s".

But because disease is more common among the 30% who are not yet reached, it is essential to press on towards the UN target of 80% by the end of 1990 and to 90% in the early years of the 1990s.

Two killers

The two biggest killers among the vaccine-preventable diseases - measles and tetanus - are the two for which immunization lags furthest behind.

more ...

Measles still claims 1.5 million young lives each year and only 60% of the third world´s children are immunized against the disease. "Those deaths are but the mortality tip of a morbidity iceberg," says UNICEF, "as other illnesses and malnutrition are up to ten times more common in the months and years following a measles outbreak".

"Measles is therefore one of the single most deadly threats to the children of the 1990s," says the report, "and universal measles immunization is one of the greatest goals for the next decade".

Immunization against tetanus also lags behind. Vaccinating pregnant women protects both mothers and new-born infants. But coverage has remained at less than 30% in the developing world as a whole and comparatively little progress has been made in the 1980s. "It is a matter of national and international shame," says Grant, "that something so easily and inexpensively preventable should be killing three quarters of a million infants and many thousands of women each year".

Missed opportunities

In almost all countries, says UNICEF, there are now two glaring low cost opportunities for pushing immunization coverage into the 80% to 90% range. At this point the transmission patterns of some diseases are so disrupted that a degree of protection is conferred even on children who are not immunized.

First, the goal of 80% immunization could almost certainly be reached in all countries if all children brought to a health clinic, for whatever reason, were screened and vaccinated if necessary. Surveys regularly show that 50% or more of the children who visit clinics for some other purpose are in need of immunization, but are allowed to leave without being vaccinated. In most immunization programmes, getting the child to the clinic is more than half the battle: failure to immunize those who do come is therefore a waste of a golden opportunity.

The second low-cost way of boosting coverage is to reduce the alarmingly high drop-out rates between the first and third doses of vaccine. "If all children who receive a first dose were to complete the full course of vaccines," says the UNICEF report, "then the 80% target would already be reached in most nations".

Stressing that demand for immunization is as important as the supply, UNICEF believes that the approach known as ´social mobilization´ is the way to make sure that all parents appreciate the urgent need for a full

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course of vaccines during the first year of a child´s life. This approach, which has succeeded in doubling or even trebling immunization coverage in several countries during the 1980s, involves mobilizing all of a society´s organised resources - its schools and mass media, its religious leaders and voluntary organizations, its businesses and trade unions, its women´s organizations and community groups, its entertainment and advertising industries - to put vital health information, such as the need for immunization, at the disposal of all citizens.

Political commitment

In the 1990s, immunization programmes in many countries face an uphill struggle because of cut-backs in health services caused by the debt crisis. But some countries have been able to finance nationwide immunization programmes merely by postponing the building of one city hospital. "The 1980s have shown," says the report, "that high coverage can be achieved even in the poorest nations and even in the most difficult of economic times".

In evidence, the report points out that 41 out of the 46 low-income African countries have sharply accelerated their immunization efforts over the last five years despite that continent´s serious economic difficulties. Similarly China, still among the poorest twenty countries in the world, has pushed its immunization coverage to over 95% nationwide.

The mainspring of immunization´s expansion in the 1980s, believes UNICEF, has been high level political commitment to the cause. "It is safe to say," says Grant, "that never before have so many Presidents, Prime Ministers and senior political leaders been personally involved in the promotion of a public health initiative".

Strengthening that high level commitment to immunization is one of the purposes of the World Summit for Children which UNICEF has called for and which is now likely to be held in September of 1990.

"Universal immunization can be achieved," says Grant, "and the lives of 3 million more children can be saved. It is not now a question of whether it is physically or financially possible: it is a question of whether there is the political commitment at the highest levels to see the task through."

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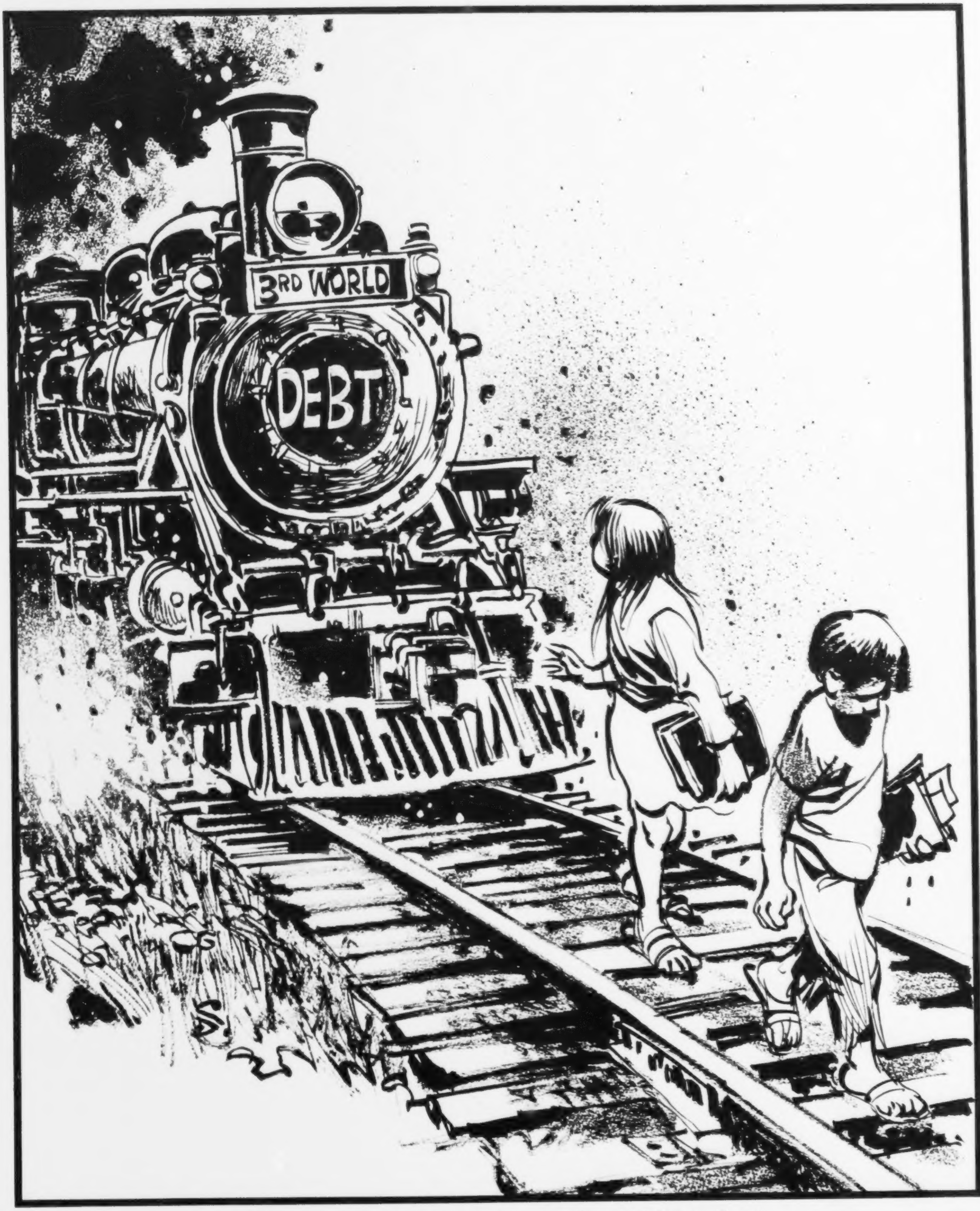
UNICEF

UNITED NATIONS CHILDREN'S FUND



Children are hardest hit by the debt crisis – spending on nutrition, health and education has been cut back in perhaps half the nations of the developing world says UNICEF.

Illustration by David Seavey of "USA Today

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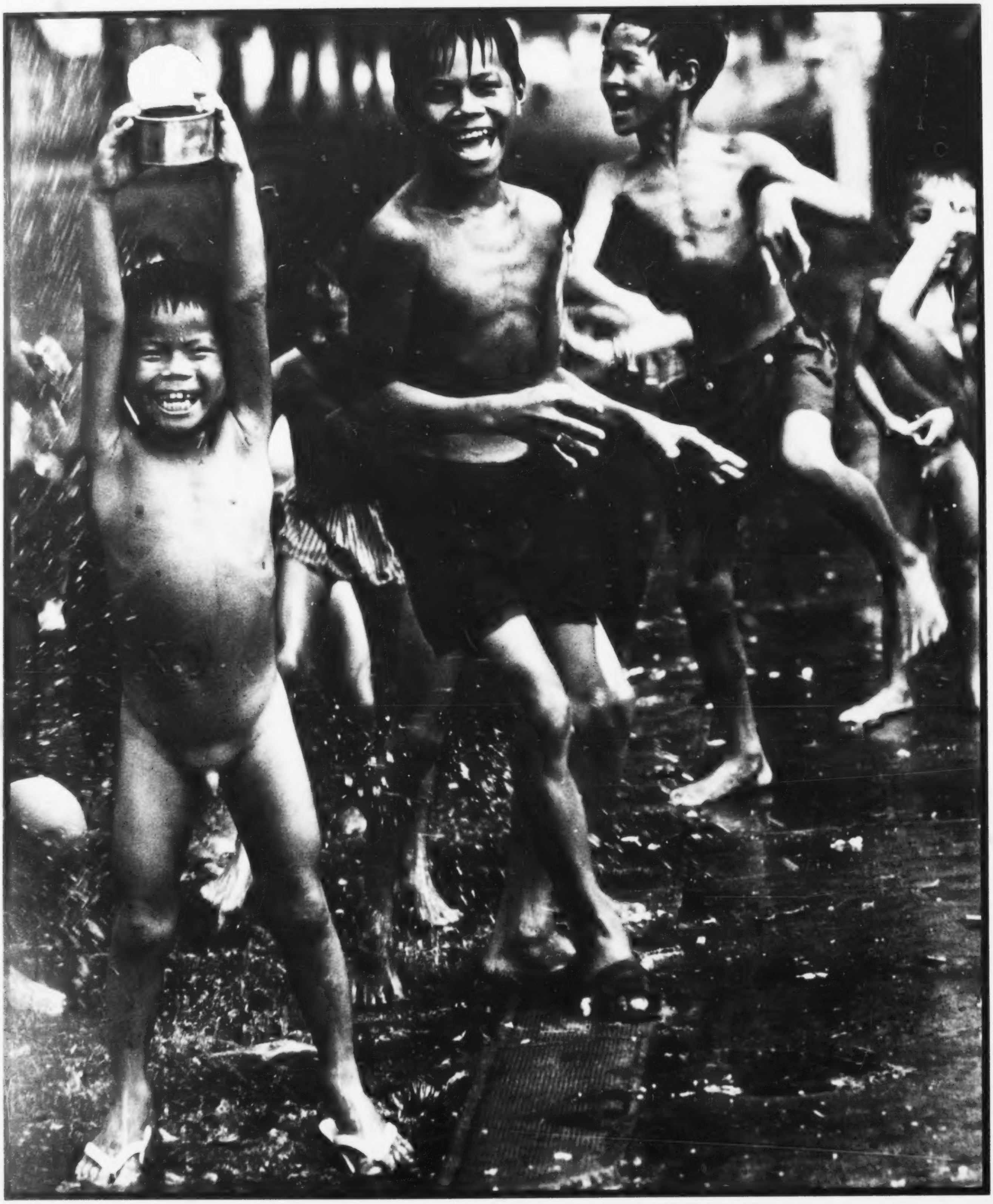

"There are now an estimated one and a half million children who are walking, running, and playing normally in the developing world today who *would be crippled by polio* were it not for the immunization efforts of the last decade"
– UNICEF's 1990 *State of the World's Children* report.

Photograph: Claude Sauvageot

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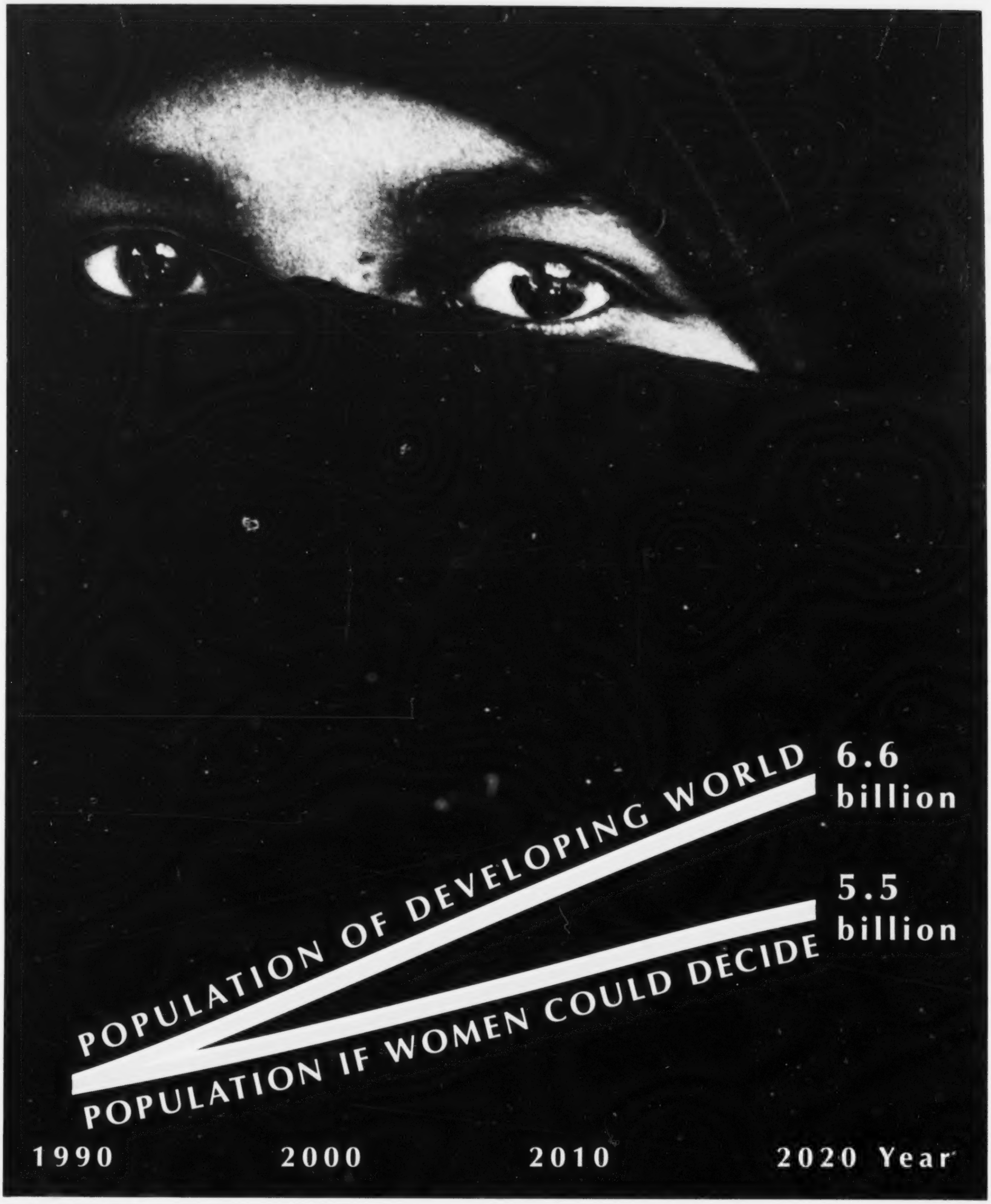

A woman's right to decide how many children to have – and when – is vital to her own and her children's health and well being. If women had that right – the impact on population growth would also be dramatic. UNICEF's 1990 *State of the World's Children*.

Photograph: Blair Seitz

UNICEF
UNITED NATIONS
CHILDREN'S FUND

One and a half billion children will be born in the decade of the 1990s – the largest generation ever entrusted to mankind. On present trends, over 100 million of those children will die before reaching the age of five. Many millions more will live on with malnutrition and ill health. Calling for a *World Summit for Children*, UNICEF argues that the time has come to do much more to protect today's children – and tomorrow's world.

Photograph: Mark Edwards/Still Pictures

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After a rapid rise in the 60s and 70s, the proportion of the developing world's children enrolled in school has begun to fall again. The first *World Conference on Education for All*, meeting in Thailand in March 1990, will seek ways to reverse the trend – UNICEF.

Photograph: Claude Sauvageot

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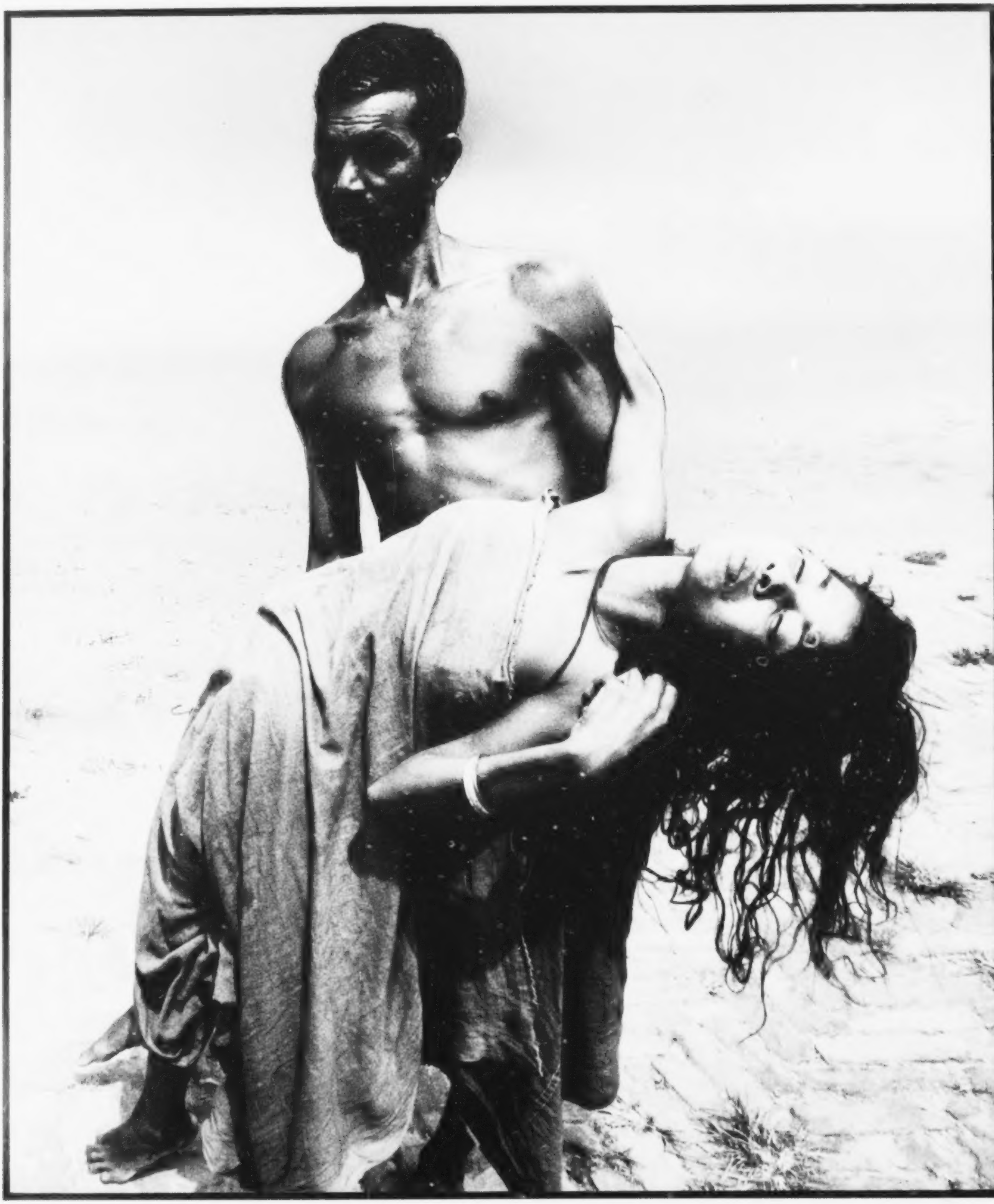

A husband seeks help for his wife – a tetanus victim and almost certainly dying. Immunization in pregnancy can protect both mothers and new borns. "It is a matter of national and international shame," says UNICEF, "that something so easily and inexpensively preventable should still be killing more than three quarters of a million infants and many thousands of young women each year."

Photograph: Paul Harrison

UNICEF
UNITED NATIONS
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Child Rights

Adult Responsibilities

"After ten years of detailed negotiations, the *Convention on the Rights of the Child* has finally been brought before the General Assembly of the United Nations. Setting minimum standards of protection for children's survival, health and education, as well as providing explicit protection against exploitation at work, against physical or sexual abuse, and against the degradations of war, the *Convention* is the first agreement among the nations of the world on the legally defined rights of the child. Like many such documents in history, it is the statement of an ideal. But as more and more nations enact its provisions into national law, and as press and public become more concerned to ensure its observance, the *Convention* may gradually become the standard below which any civilized nation, rich or poor, will be ashamed to fall."

UNICEF's 1990 'State of the World's Children' report

Photograph: Claude Sauvageot

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TIME BIRTHS TO SAVE LIVES

Child deaths are far more common when births are too many or too close together or to mothers who are too young.

TOO YOUNG

	Infant deaths
Mother aged 18–34	8%
Mother less than 18	12%

TOO CLOSE

	Infant deaths
More than 2 years	6%
Less than 2 years	14%

TOO MANY

	Infant deaths
Births 2 & 3	7%
Births 4, 5, 6 & 7	12%

Results from research done in Brazil

Illustration Stephen Hawkins   Photograph Claude Sauvageot

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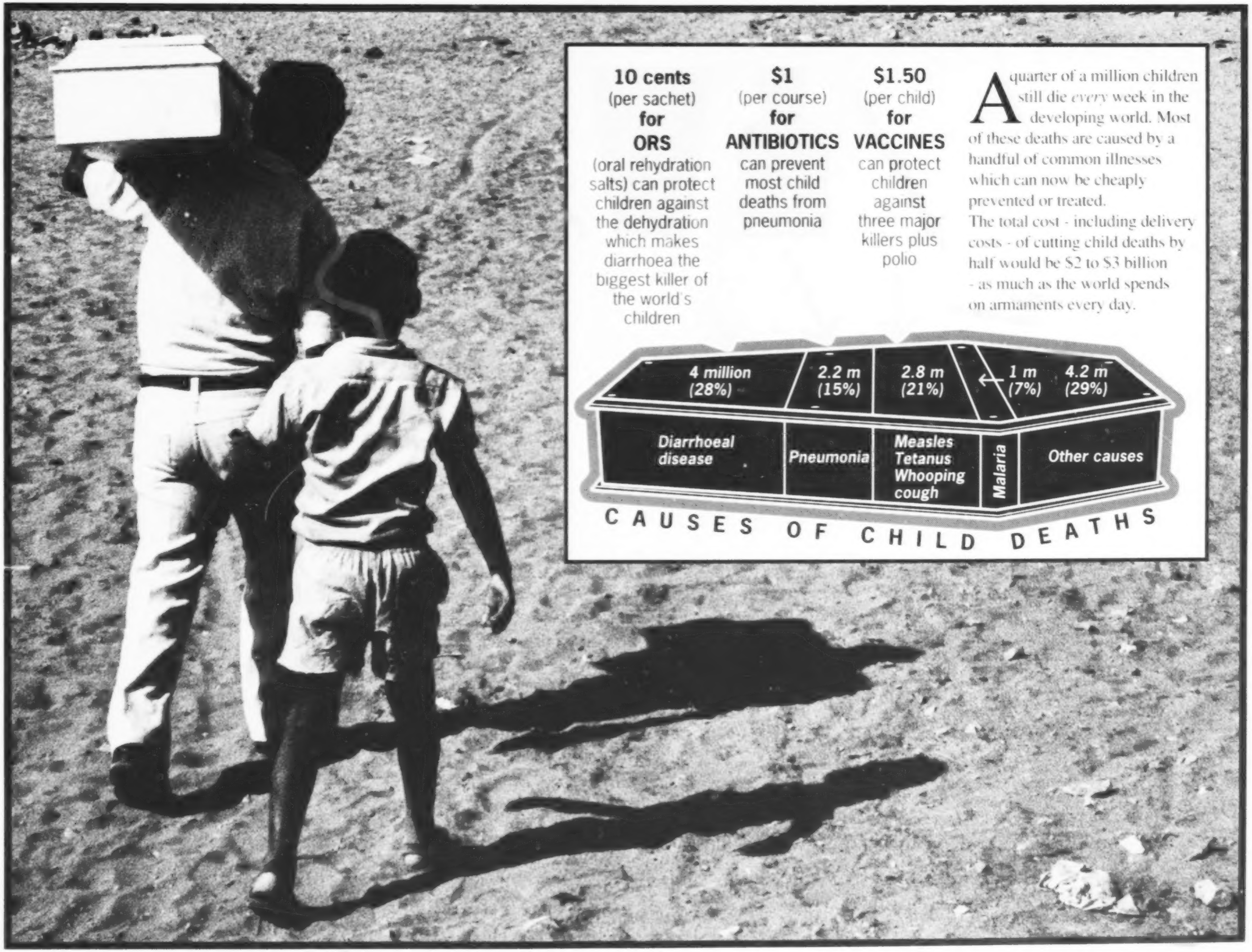

10 cents
(per sachet)
for
ORS
(oral rehydration salts) can protect children against the dehydration which makes diarrhoea the biggest killer of the world's children

$1
(per course)
for
ANTIBIOTICS
can prevent most child deaths from pneumonia

$1.50
(per child)
for
VACCINES
can protect children against three major killers plus polio

A quarter of a million children still die *every* week in the developing world. Most of these deaths are caused by a handful of common illnesses which can now be cheaply prevented or treated.
The total cost - including delivery costs - of cutting child deaths by half would be $2 to $3 billion - as much as the world spends on armaments every day.

Photograph: Ellan Young Illustration: Stephen Hawkins

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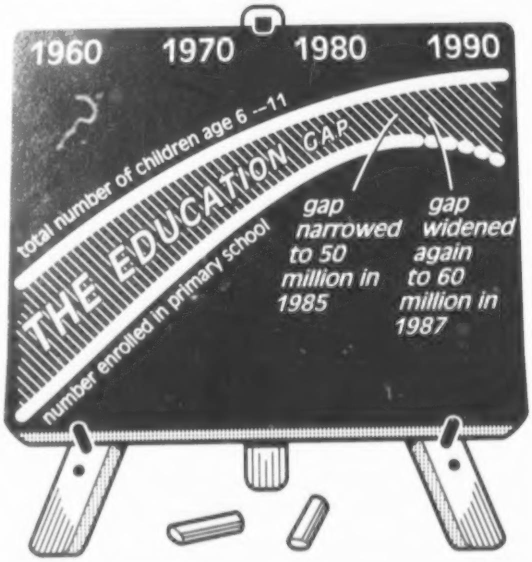
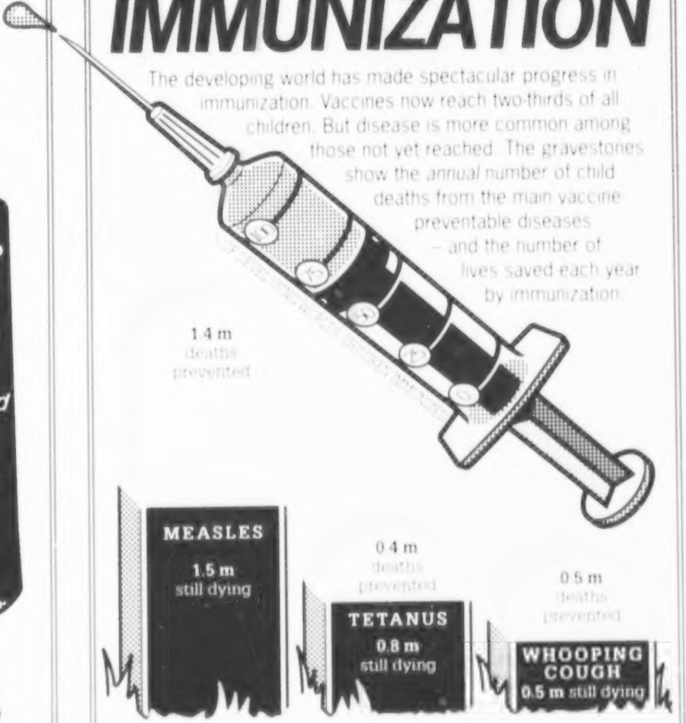
EDUCATION

After rising rapidly for decades, the proportion of the poor world's children enrolled in school is beginning to fall again under the impact of the debt crisis. High drop-out rates remain the biggest problem.



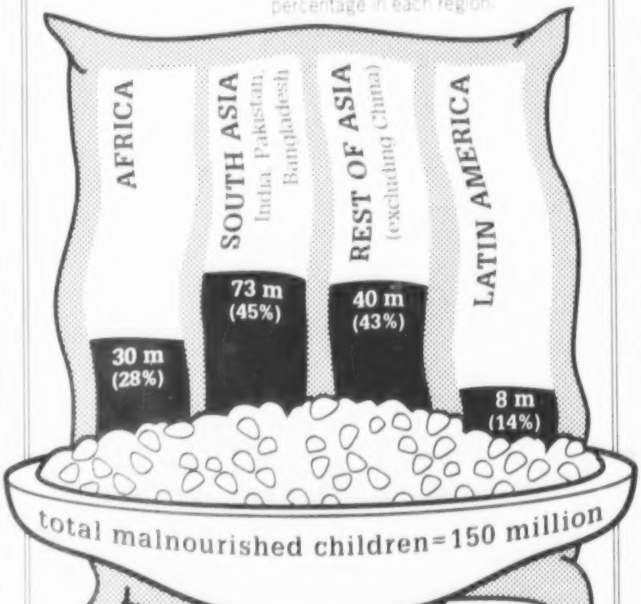
IMMUNIZATION

The developing world has made spectacular progress in immunization. Vaccines now reach two-thirds of all children. But disease is more common among those not yet reached. The gravestones show the *annual* number of child deaths from the main vaccine preventable diseases – and the number of lives saved each year by immunization.



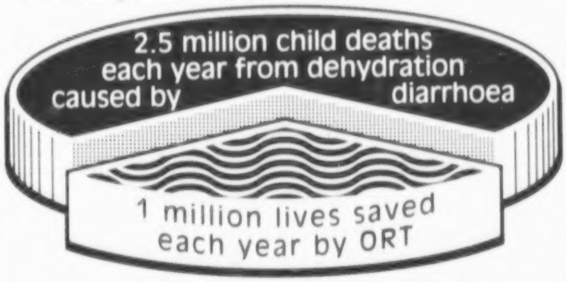
FOOD

A new global assessment by UNICEF shows a third of the developing world's children (under 5) are malnourished. The chart shows the number and percentage in each region.



ORT

Diarrhoea is the biggest killer of the world's children. Most victims die from dehydration – which can be prevented by oral rehydration therapy (ORT). ORT means giving plenty of fluids – rice water, soup, fruit juice, tea, coconut water, breast milk or oral rehydration salts (ORS). Even if dehydration begins, ORS (costing 10 cents) can almost always cure it.



The glasses show what percentage of the poor world's families use ORT when a child has diarrhoea.

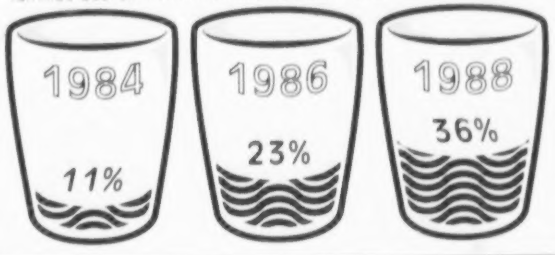


Illustration: Stephen Hawkins

Graphics

Visual presentations on the main findings of the 1990 *State of the World's Children* report – including graphics by David Seavey of *USA TODAY*.

Photographs

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This press file was produced by Peter and Lesley Adamson
18 Observatory Close, Benson, Oxford, OX9 6NU, United Kingdom